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ABSTRACT

The School Health Demonstration Program (SHDP), undertaken in 1981, is a coordinated effort by the New York State Departments of Health, Education, and Social Services to provide direct health care, health promotion/illness prevention, and health education to children from low income communities with inadequate access to primary health care services. This report contains the results of the 1982-83 school year evaluation from four separate studies: a formative evaluation, a school-site health care study, a principal and teacher survey, and a utilization/cost impact study. Evaluation highlights from the nine demonstration projects include: (1) linking the school team to a health facility offers many benefits; (2) 63 percent of the 36,000 children in participating schools were formally enrolled in the program; (3) the SHDP had 83,602 encounters with children during the school term; (4) trauma, usually minor, was the most common reason for visits; (5) six percent of all encounters led to referral, most commonly for eye disorders, respiratory problems, and acute injuries; (6) the staffing pattern seems appropriate; (7) the SHDP reached children and their families with a wide-ranged health education curricula; and (8) principals and teachers enthusiastically supported SHDP staff and services: both reported positive impacts on attendance and learning. (ES)

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Evaluation of the NYS School Health Demonstration Program

SEPTEMBER 1982 -
JUNE 1983

Prepared by WRI, 112 State Street, Albany, NY, 12207

EVALUATION OF THE NEW YORK STATE SCHOOL HEALTH
DEMONSTRATION PROGRAM

September 1982 - June 1983

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EXECUTIVE SUMMARY

The School Health Demonstration Program (SHDP) was undertaken in 1981 as a coordinated effort by the New York State Departments of Health, Education, and Social Services. The demonstration is one of many initiatives taken by New York State to meet the health care needs of children who have inadequate access to primary health care services.

The health and social indicators in underserved areas attest to the direct effects that limited health services can have not only on children's physical well-being but also on their educational performance and development and school attendance. The SHDP is testing a strategy to ensure schoolchildren's access to health care. Using the school site ensures that health services are readily accessible to children. And in many cases the school site is more convenient to parents than health facilities. The linkage of the program to community health facilities provides continuity of care for children during nonschool hours and vacations and can provide other family members with a source of regular medical care.

The model uses a team consisting of a health aide and a mid-level practitioner (nurse practitioner or physician's assistant), with supervision and backup provided by a pediatrician or a family practice physician. Medicaid reimburses the program for comprehensive physicals and selected primary care and follow-up care rendered to eligible children.

The demonstration model is more than a satellite clinic; individual projects are very much involved in prevention and health promotion. A number of projects have chosen social workers, health educators,

nutritionists, and dental hygienists to augment the school team. Moreover, the cooperative interface between the education and health systems has been of benefit to the children. In addition to responding to illness, the health/education collaboration allows for better diagnosis of and response to problems that have been designated as the "new morbidity"; that is, problems associated with family violence and disorganization, learning disabilities, behavioral problems, substance abuse, and physical and mental disabilities. The demonstration model also goes beyond the medical model in its initiatives to reach families in their homes and communities.

This evaluation report covers the 1982-83 school year. Highlights of the evaluation findings are as follows:

- The SHDP was implemented in nine sites in low-income communities in Buffalo, Rochester, and New York City. Fifty-five public, parochial, and other private schools and Head Start and day care centers were served by the SHDP. Close to 36,000 children attended the participating schools and centers. The schools were primarily elementary level but spanned the range from preschool to high school. The day care program accepted children as young as two months.
- Linkage of the school team to a health facility offers many benefits, including continuity of care for children during nonschool hours, credibility and accountability, access to third-party reimbursement and billing, and staff or other resources that are sometimes contributed by the backup facility.
- A total of 22,689 children were formally enrolled in the SHDP by their parents. This figure represents 63 percent of the total number of children attending the participating schools. Most parents that enrolled their children in the SHDP chose either of the two level-of-care options that covered more than the usual health services available at the school. Out of the entire school population, 53 percent of the children were enrolled for comprehensive physicals or complete care, and the parents of 83 percent of the SHDP enrollees chose these options for expanded services.

- The SHDP had 83,602 encounters with children during the school term. Services rendered during these encounters included the following:

- 7,212 comprehensive physical exams
 - 22,373 primary care services
 - 9,121 follow-up visits
 - 2,119 immunizations
 - 15,055 first aid and responses to minor complaints
 - 38,514 screenings

Because more than one type of service can be provided during an encounter, the number of services exceeds the number of encounters. Many additional contacts were made with parents, teachers, principals, and others about children.

- The most common reason for teacher- or child-initiated visits to the health office was trauma, most often minor but sometimes serious. Stomachache and skin problems (including lice) together with trauma accounted for almost 60 percent of the visits.
- Referrals were made by the SHDP teams either because they did not have parental consent to diagnose or treat the child or because an SHDP-enrolled child required more complicated diagnosis or treatment than could be rendered on site. Overall, the project reported that 6 percent of all encounters led to referrals. The most common reasons for referral were eye disorders (and vision problems), respiratory problems, and acute injuries.
- The staffing pattern used in these projects appears to be appropriate for responding to many of the health needs of the children attending the participating schools. The core team consisted of a mid-level practitioner, health aide, and consulting pediatrician or family practice physician. Dental hygienists, social workers, nutritionists, and health educators augmenting some project teams provided additional valuable intervention.
- The SHDP reached children and their families with health education curricula covering a wide range of topics, including dental health, family life education, poison prevention, and summer safety. Information was disseminated in classrooms, by newsletters, at health fairs in the community, and at meetings of parent-teacher organizations.

- Principals and teachers were enthusiastic supporters of the SHDP. They reported a high degree of satisfaction with the staff and services and appreciated having a resource that could respond quickly to accidents and illness. Principals reported that they also valued preventive services, including physical examinations, immunizations, and screening. Both teachers and principals reported positive impacts on attendance and learning.

FOREWORD

The children who appear in this report only as numbers live in urban areas blighted by physical decay, unemployment, crime, and hunger. The schools contrast sharply with their surroundings. They are brightly lit, clean, and orderly. Colorful displays splash the walls, and the children are animated. The enthusiasm of the school health team is demonstrated by their interactions with the children and the cheerful health rooms, often decorated and painted on team members' personal time.

Of necessity this evaluation assigns these children to categories that are then counted and compared. But as a reminder to the reader, the list that follows better identifies the needs of some children who appear as numbers in the pages of this report. Case studies were reported by project administrators and team members during interviews and in quarterly reports.

The types of children reached by the projects include the following:

- the first grader who can't hear the teacher because of an ear infection
- the girl who was bitten by a rat at home
- the pregnant 15-year-old
- the child who uses the school health room as a refuge from an otherwise overwhelming environment
- a suicidal adolescent
- the epileptic child whose classmates learn about his condition and how they can help
- the bedwetter (and his frustrated parent)
- the athlete with a heart murmur

- children who suffer stomachaches because they haven't had enough to eat
- children who are seriously underweight, and some who are obese
- children of all shapes and sizes who have been poked, scraped, cut, and bumped, all in the course of a normal day

GLOSSARY OF ABBREVIATIONS AND KEY TERMS

Article 28 Facility	Health facility licensed pursuant to the New York State Public Health Law
HA	Health aide
MA	Medical assistance (Medicaid)
NP	Nurse practitioner
NYSDOH	New York State Department of Health
NYSOSS	New York State Department of Social Services
PA	Physician's assistant
SED	State Education Department
SHDP	School Health Demonstration Program
SHDP Levels of Care	Options for the type of care that can be rendered by the SHDP team.
	Level 1: First aid, response to minor complaints, immunizations, mass screening, referral and follow-up (available to all children regardless of enrollment)
	Level 2: Level 1 plus complete physical examination, including laboratory tests
	Level 3: Levels 1 and 2 plus care for acute and chronic illness

1 BACKGROUND

Description of the SHDP

Infant, child, and adolescent health indicators in low-income communities in New York's urban areas continue to attest to the need to find better ways of delivering primary and preventive care to children. Recognizing that lack of access to comprehensive and continuous primary health care is one factor that contributes to poor health, the State Legislature, through Chapter 50 of the Laws of 1981, appropriated \$2 million "to establish, support, and conduct projects to provide improved and expanded school health services for preschool and school-age children."

An interagency advisory committee was established to identify the most appropriate program model, to develop the RFP and selection criteria, to review proposals, and to help obtain the necessary waivers, rate approvals, and data. The committee included representatives from the State Departments of Health, Education, and Social Services and the New York State Council on Children and Families.

The School Health Demonstration Program (SHDP) consisted of nine contracts with State-licensed (under Public Health Law Article 28) hospital ambulatory care departments and neighborhood health care centers in New York City, Rochester, and Buffalo that provided primary care, illness prevention, health promotion, and health care education in schools and day care/Head Start centers. These services were to include physical examinations, screening, primary care (diagnosis and treatment), immunization, first aid, dental services, health education, counseling, referral, and follow-up.

In its current form, the program is designed to promote good physical and mental health, to prevent illness leading to disability and hospitalization, and to facilitate learning and healthful living. These goals are to be reached by establishing community-based projects designed to:

- ensure adequate access to appropriate and comprehensive health care services
- encourage disease prevention and health promotion
- identify and manage health-related problems
- provide primary care services

To address one of the thorniest problems associated with the delivery of health care at school--how to remain accessible when school is not in session--the parents of program participants are instructed to bring their children to the backup Article 28 health center or their regular health care provider at such times. Children who use the backup health center during vacations and holidays and between 3 and 5 pm on school days can be seen by members of the SHDP team. To further promote continuity, other family members are encouraged to receive their primary health care at the backup center or another appropriate health care provider familiar with the family unit.

The core health team at the school site consists of a mid-level practitioner (either a nurse practitioner or a physician's assistant) and a health aide or community health worker, with regular supervision and support provided by a pediatrician or family practice physician. In these demonstration projects, nurse practitioners are authorized (by Chapter 198 of the Laws of New York, 1978) to perform expanded functions, which include "diagnosis of illness and performance of therapeutic and corrective measures,

including issuance of prescriptions and drugs, other than controlled substances, and immunization against preventable diseases." (Physician's assistants already have such statutory authority.) In some cases the team is augmented by other professionals such as dental hygienists or social workers. A project director and program administrator at the health center are responsible for coordination, operations, and reporting.

Buffalo, Rochester, and New York City were selected as the demonstration sites because they contain areas of high risk and because these cities are exempt from the requirements of State-mandated public school pupil medical inspections and examinations (under Article 19, Section 901, of New York State Education Law). In these cities, school health services are under the jurisdiction of the local public health departments and local boards of education. The demonstration was in part a response to the need (particularly in New York City and Buffalo) to develop a model that could be replicated in all high-risk areas. In these cities, severe municipal budget reductions in the mid-1970s had substantially decreased staffing levels and undercut city/county school health programs.

In the fall of 1981, the Department of Health issued a request for proposals for licensed health care providers in these three cities. Projects were selected on the basis of demonstrated community need, strength of the proposed program, and capabilities of the contractor. More specifically, demonstration communities were selected in part on the basis of scores on a combination of indicators, including percentage of fully immunized children, infant mortality rate, hospitalization rates for pre-school and school-aged children, percentage of low birth weights, teenage pregnancy

rate, and percentage of children receiving free school lunches. Other selection criteria included the extent of school and school district support, the quality of the proposed programs, and the qualifications, past performance, and demonstrated commitment of the health facility to preventive and primary care for children. In January 1982, the following nine demonstration projects were selected:

- Bronx-Lebanon Consortium, NYC (consisting of the Bronx-Lebanon Ambulatory Care Network, the Martin Luther King, Jr., Health Center, the Morrisania Neighborhood Family Care Center, the Montefiore-Morrisania Comprehensive Health Care Center, and the Morris Heights Health Center)
- East Harlem Council for Human Services, NYC
- Harlem Hospital, NYC
- Hunts Point Multi-Service Center, Inc., NYC
- Jamaica Hospital, NYC
- Lutheran Medical Center, NYC
- Lyndon Baines Johnson Health Complex, NYC
- Anthony L. Jordan Health Center, Rochester
- Geneva B. Scruggs Health Center, Buffalo

The addresses of these facilities and the names of the school health program directors and administrators are included in Appendix A. The names and addresses of the participating schools can be found in Appendix B.

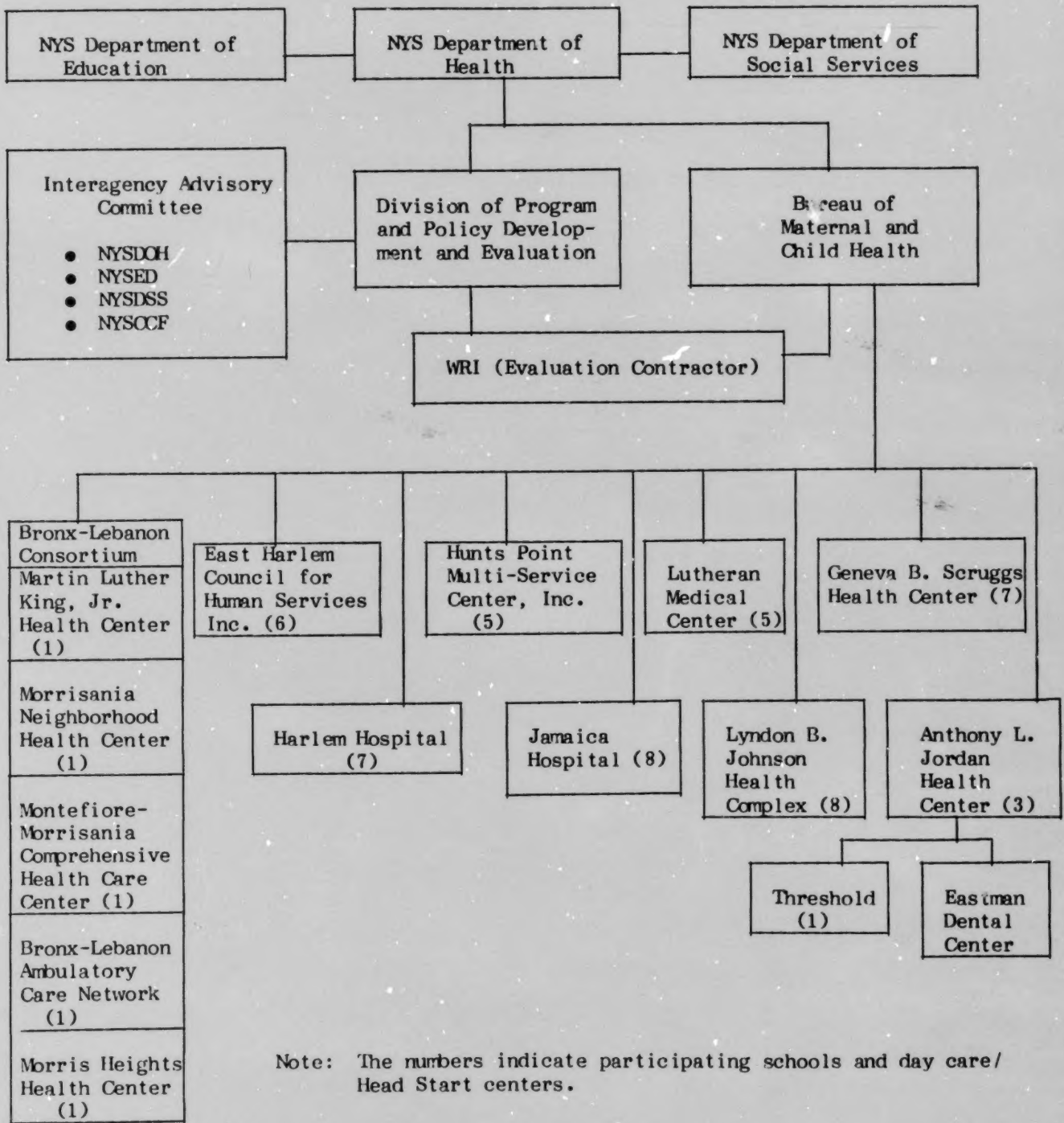
The projects represent three organizational types. There are seven individual health providers (either hospitals or neighborhood health centers), one consortium, consisting of a hospital and satellite neighborhood health centers, and one model in which a comprehensive adolescent

services center and a dental center are under subcontract to a neighborhood health center (A.L. Jordan). A total of 55 schools (44 public and 11 non-public) participated in the project. Although primarily oriented toward elementary school children, the program also included intermediate and junior high schools, one senior high school, and preschool programs.

Figure 1.1 illustrates the organization of the SHDP during the 1982-83 school term.

The primary source of funding for the program is a State appropriation. During the 1982-83 school term, State funding derived from two sources. Funds totalling \$1.5 million, originally appropriated in the 1981-82 executive budget under Chapter 50 of the Laws of 1981, were reappropriated to support the project between August 1982 and March 1983. For the period April 1983 through June 1983, an additional \$500,000 was appropriated under Chapter 300 of the Laws of 1982. The State appropriation funds project grants, some of the BMCH staff, and the evaluation. At the project level, State funds are supplemented by in-kind contributions, foundation grants, and third-party revenues generated at the school sites. One unique feature of New York's program is that comprehensive physical examinations and selected types of episodic and follow-up care provided to Medicaid-enrolled children (by mid-level practitioners or physicians at the school) are reimbursable by Medicaid at the rates of \$26.20 for the comprehensive physical, and \$17.50 for episodic and follow-up visits.

FIGURE 1.1: SHDP Organization Chart



Services Provided by the Program

According to descriptions in the literature, there are currently three types of school health approaches.* In one approach, primary health care is delivered at the school site, the school health office is much like a satellite clinic, and comprehensive health examinations and primary health care are provided, in addition to the usual school health services such as screening and first aid. Family members can also use these clinics. In other projects, a linkage approach is used to coordinate problem identification at school with referrals to parents and their regular health providers in the community. The school program also provides follow-up to see that conditions have been treated. In the most traditional school health model, the emphasis is on health education and prevention, with certain health problems identified through mass screening and inspections. Published accounts of these projects suggest that all school-based health programs provide children with access to health care, and they hold promise for promoting health and preventing illness, either directly or indirectly. Few of these programs, however, had by 1981 published reports of any rigorous evaluation of impact or outcome.

The three main aspects of the SHDP are direct health care, health promotion/illness prevention, and health education. The most innovative aspect of the SHDP is that primary care is rendered at the school site in

* The better-known among recent school health demonstration projects include the pilot Galveston Independent School District Program and four subsequent demonstration projects funded by the Robert Wood Johnson Foundation: the Comprehensive Health Services, Inc., project in Hartford, Connecticut; the Cambridge Primary Care Program for Children, in Massachusetts; and in New York, the Buffalo School Health Demonstration and the Chancellor's school health project (New York City).

conjunction with the usual school health services. In responding to episodic illnesses (such as otitis media and respiratory infections), mid-level practitioners can diagnose and treat children according to medical protocols (established by the Article 28 health facility and approved by the New York State Department of Health), and these practitioners can issue prescriptions. Practitioners and health aides also respond to medical emergencies, as well as the bevy of minor complaints, bumps, and bruises common to school-aged children.

A variety of prevention and health promotion activities are conducted at the schools and in the community. A major program initiative is to provide routine physical examinations to those children whose parents have given consent. Unlike the health inspections conducted in traditional school health programs, the protocol for the comprehensive physical examination in the SHDP includes, at a minimum, the following elements:

- complete medical history
- complete physical examination (with the child undressed)
- hematocrit, urinalysis, tuberculosis testing, unless contraindicated
- sickle cell screening as indicated
- vision and hearing testing, height and weight screening with growth chart, scoliosis screening
- immunization history and updating
- neuro-developmental evaluation, when indicated
- discussion and counseling
- assessment with a follow-up plan

Immunizations are also administered at the school site, if needed, to children who do not receive a complete physical examination. In the New York City projects, screening is a major focus of the SHDP, and children are given vision, and hearing screenings mandated by the city. Other types of screenings provided by some of the projects include height and weight, scoliosis, lead, dental, sickle cell, and pediculosis (lice). In three of the nine projects (A.L. Jordan, Rochester; G.B. Scruggs, Buffalo; and East Harlem, NYC) the mandated screenings are performed by staff of other organizations, such as the county health department and other demonstration projects, with SHDP staff providing assistance as needed. Health promotion takes place in the classroom in conjunction with health education, and in the health office in the form of counseling children and their families. Community outreach at health fairs and parent-teacher association meetings is another way in which these projects promote health.

Health education is an important aspect of the demonstration program model. Responding to needs expressed by teachers and principals, the SHDP staff have identified resources and participated in programs covering a wide range of topics, including poisoning, substance abuse, dental health, family life and sex education, eyes and ears, and safety. The team also provides health information on a one-to-one basis to children with chronic illness, and to the families of these children. Teachers and principals rely on the SHDP team to answer their questions about health problems that can affect the entire school, such as lice outbreaks and communicable diseases.

Enrollment

Nearly 36,000 children attend the schools participating in the SHDP. All of these children are eligible for the usual health services mandated by their local school districts and city/county health departments, and they benefit from the schoolwide health education programs conducted by project staff. In addition, all of these nearly 36,000 children are eligible to enroll in the SHDP for more comprehensive care.

All of the SHDP projects conduct a formal enrollment process in which parents, or guardians, provide signed consent in order for their children to participate. If signed consent forms are not returned, children are still eligible for the school health services available to other children in their city (first aid; mass screening for vision, and hearing, and referral of children with abnormal findings; and responding to minor complaints). Parents wishing their children to participate in the SHDP can consent to one of three levels of care, as follows:

- Level 1: First aid, response to minor complaints, immunizations, mass screening, referral and follow-up (available to all children regardless of enrollment)
- Level 2: Level 1 plus complete physical examination, including laboratory tests
- Level 3: Levels 1 and 2 plus care for acute and chronic illness

Although Level 1 care is available to all children, eight out of the nine projects request signed consent for this level. This enables the project administrators to determine whether parents have knowingly selected the lowest level of care. If parents do not respond at all, it may be that they did not receive the consent forms from their children. Nonresponse is a signal that there is a need to try other ways of contacting these families.

By the close of the 1982-83 school term, 22,689 children were formally enrolled in the SHDP, a figure that represents 63 percent of all eligible children. Of those enrolled, 60 percent were enrolled for complete care, 23 percent for complete physical examinations, and 17 percent for the usual school health services only.

Evaluation

From the inception of this demonstration, the sponsors of the legislation and program administrators recognized that an evaluation was needed to measure the program's accomplishments, outcomes, and costs. It was believed that an evaluation would provide ongoing feedback that would help the program administrators develop a more effective program, determine the extent to which the demonstration was achieving its objectives, and assess the feasibility of a wide-scale replication.

Under subcontract to the Department of Health, WRI, a not-for-profit organization, has conducted activities designed to facilitate the Department's monitoring and evaluation efforts.

During the earlier stages of the demonstration, WRI completed the following:

- a state-of-the-art literature review and an annotated bibliography*
- interviews with State and city agencies to identify salient school health issues and evaluation concerns
- a brief orientation for the new grantees that covered the role of evaluation in the demonstration, the evaluation methods, and the grantees' own evaluation needs and plans

* The School Health Services Annotated Bibliography (updated 1983) is available from WRI.

- reporting logs, forms, and instructions and training for selected grantees in their use
- data on current school demographics and prior school health activities in the participating schools
- consultation services to the Department concerning possible evaluation components and the possibility of utilizing MMIS data for the evaluation

For the most part, this report contains evaluation findings for the 1982-83 school year only. Although project activities began before September 1982, the use of the school calendar year facilitates comparison with other school health demonstrations, which typically are described on a school-year basis. While the discussion of implementation (section 3) necessarily predates September 1982, an understanding of the complex implementation process is necessary for interpreting the findings presented in this report.

2 METHGDOLOGY

The objectives of the evaluation were to measure project accomplishments and, to the extent feasible, determine the SHDP's impact on children's health, their capacity to learn, and their utilization of health care services.

Evaluation during the first full school year of project operations addressed the following four major questions:

- What is the program model and how did it develop?
- To what extent has the SHDP achieved its objectives?
- From the perspective of principals and teachers, how well has the program been integrated into the schools?
- What has been the impact of the program on the overall utilization (and associated costs) of health services by children?

The evaluation results are expected to aid the Department of Health, the State Education Department, and other State agencies in making decisions about the future direction of health care services for school-aged children. Moreover, the results are expected to assist others in planning effective school health programs.

Four separate studies were designed as ways of assessing the project's accomplishments and impact after its first full school term of operation. These studies were a formative evaluation study, a school-site health care study, a principal and teacher survey, and a utilization/cost impact study.

Underlying all of the data collection efforts was the intention to collect uniform types of information from each of the nine projects (involv-

ing fourteen Article 28 health facilities) so that the demonstration projects could be evaluated as a group and so that meaningful comparisons could be made between projects. Each of the projects had a management information system, and some had other reporting needs to be accommodated. The school logs and reporting forms developed jointly by BMCH and WRI were used by most of the projects.

Data for the evaluation were collected throughout the school term. As described in this section, the data collection instruments and schedules were different for each study.

Formative Evaluation Study

The formative evaluation study was designed to describe the organizational and programmatic evolution of the demonstration project. Through meetings with the Department, the interagency committee, and the nine projects, WRI staff obtained an understanding of the models and the policy decisions, obstacles, and facilitating events involved in program development, which provided background for evaluating outcomes.

Data were collected from the following sources:

- minutes of meetings with and memos from the Division of Program and Policy Development and Evaluation, the Bureau of Maternal and Child Health, and the SHDP grantees (as a group and separately)
- minutes of the interagency school health committee meetings
- interviews with the project directors and/or program administrators conducted at the end of the school term
- site visits to all of the grantees and selected schools at each project

School-Site Health Care Study

The school-site health care study was designed to measure to what extent selected program activities were actually conducted, especially enrollment and the provision of health care services, in order to determine whether the program was meeting its objectives. Data were collected from reports routinely submitted by projects to the Bureau of Maternal and Child Health on reporting forms and logs developed by WRI and the Department's school health administrative staff. In addition to the aggregate data reported on the forms, the study used client data reported on daily logs. These log entries covered children's visits to the health team for all direct services excluding mass screening. (The reporting forms and logs are included in Appendix C.) The reports covered the periods 9/82-11/82, 12/82-2/83, and 3/83-6/83.

The Enrollment Status Report includes statistics on cumulative enrollment in the program--the number of children who have returned consent forms to date minus those who have left the program--and the levels of care selected. For new enrollees during the period, the projects report coverage by public and private insurance and regular source of primary care. Project staff collect most of this information on consent forms and health histories.

The Health Services Report includes the total number of encounters, the sources of client contacts, the number of abnormal findings discovered in the mass screenings, and the conditions seen on site. Information reported about referrals includes the number, reasons, the types of provider utilized, and outcomes. Since projects may also engage in various other activities, they submit a narrative describing such activities. Often

the types of activities reported include health education, teacher and parent conferences, assistance to principals on health matters concerning the school, operational or administrative activities, continuing education and in-service training, and community outreach.

The information that is aggregated for the periodic reports and that used for the in-depth study of student utilization of services comes from the Daily Visit Log or an adaptation of the log that documents health care visits for each child. In addition to the data that are reported to the State, the log is used to record the age, sex, grade, and enrollment status of each student who uses the service. Information about the presenting complaint includes the ICD-9 code (if primary care is rendered) and whether the condition was the direct consequence of aggressive behavior on the part of another. The log further documents the type of SHDP team member that provided the care, the disposition, whether a prescription was written, and whether a referral was made.

The Referral Log documents the reason for referral, ICD-9 code, the date referral was made, the type of provider to whom the referral was made, follow-up attempts, and the disposition of the referral.

The in-depth study of utilization at the school site covered visits made from September 1982 through March 31, 1983. The sample of children used for the study was drawn from the following nine schools in four projects:

Bronx-Lebanon Consortium, New York City

- CES 55
- CES 73

East Harlem Council, New York City

- PS 96
- JHS 45

Lyndon B. Johnson Health Complex, New York City

- PS 282
- Tabernacle Day Care Center

Anthony L. Jordan Health Center, Rochester

- PS 9
- Ben Franklin Jr./Sr. High School (Jr. High only)
- St. Stanislaus

These schools were selected to represent the full range of characteristics thought to be potentially associated with project outcomes: program model, organizational model (consortium or centralized structure), type of mid-level practitioner employed, size of schools, grade level of schools, geographic location, proportion of SHDP enrollees covered by Medicaid, and proportion of total schoolchildren enrolled.

A 50 percent sample was selected from a roster of currently enrolled children that was supplied by each of the selected schools. The enrollment status, grade, and Medicaid coverage of each of these children was obtained, and the daily visit and referral log entries for each sample child were identified and entered into the computer.

The Principal and Teacher Surveys

The principal and teacher surveys were designed to provide insights about the integration of the program into the school. These studies assessed teachers' and principals' levels of satisfaction with the models and sought their opinions about the program's impact on attendance and learning.

The survey of principals (and directors of the Head Start and day care programs) was conducted between mid-April and June 1983. At this point the program had been operating in the schools for between eight and twelve months, so respondents were reporting their impressions of a new program but one that had also had sufficient time to settle into a routine.

Each of the principals and directors was sent a questionnaire, which was to be completed and returned to WRI (see Appendix D). Because the two Head Start centers shared one director, questionnaires were sent to a total of 54 individuals. School district superintendents proved to be extremely helpful in distributing the questionnaires and following up when response was slow. A total of 34 questionnaires were returned, representing an overall response rate of 63 percent.

The teacher survey was conducted in May and June of 1983 in ten schools and one day care center in five projects. The schools were the same as those selected for the study of school-site health services utilization, with the addition of two schools from the Lutheran Medical Center project (PS 314 and PS 94). These schools were considered to be representative of the project's 55 schools and Head Start/day care centers. The study population consisted of all full-time classroom teachers in these schools.

The data collection instrument was a self-administered questionnaire containing a subset of questions from the principal survey instrument (see Appendix D).

Of 328 questionnaires distributed, 139 were returned, a 42.4 percent response. The respondents represented teachers of every grade level from kindergarten through eighth grade. At the time that teachers responded to the survey, the SHDP had been operating in these schools for approximately nine months.

Utilization/Cost Impact Study

The utilization/cost impact study is designed to determine the extent to which the SHDP has had an impact on the utilization and cost of medical services. This study focuses on SHDP enrollees who are covered by

Medicaid and looks at service utilization both at the school site and in the community. Comparisons will be made with a group of children covered by Medicaid in neighboring geographic areas. Since this study is still in progress, the findings will be disseminated in a separate report.

Summary

This evaluation responds to the expressed interest in learning whether the Article 28-school partnership was effective in increasing children's access to primary care, and in containing costs. It also addresses the question of how successfully the program was integrated into the school setting. The findings presented in this report are the outgrowth of three studies conducted during the school term. The evaluation activities conducted during 1982-83 concentrated on the following aspects of the School Health Demonstration Program:

- the implementation process
- health services delivered at the school site
- the satisfaction of school principals and teachers with the program
- the impact of the program on student health care utilization and costs, both in the SHDP and elsewhere in the community

This report contains findings that pertain to all but the last aspect, since that study is still in progress.

Since the SHDP emphasis is on primary and preventive health care delivery, the evaluation of the program focuses on these aspects. However, the reader should be aware that all of the projects also conduct other activities. Individual projects may work toward additional objectives that

respond to special needs or resources in their communities, including dental programs, community outreach, community organization, information and advice to parents, teachers, and principals, and psychological services. Although these activities could not be assessed by this evaluation, clearly they affect children's well-being, as well as staff satisfaction, and they should be taken into account when assessing the year's accomplishments.

The reader should also take into account that the figures derived from the evaluation studies represent real children and families. In order to show how these numbers translate into the experiences of children and their families, case studies that illustrate the statistical findings are interspersed through the text.

3 IMPLEMENTATION OF THE SHDP

When the grantees were selected in January 1982, the School Health Demonstration was a vision with nine variations on a theme. Because the demonstration involved nine sites in three cities, as well as innovative approaches to health services, interface between the health and education systems, and intra-agency coordination at both the state and local levels, its implementation was necessarily complex.

The implementation phase of the demonstration can be said to have begun with the selection of the grantees in January 1982. Although the projects differed in the speed with which they were able to begin providing services, by the late fall of 1982, all of the projects had begun to operate in all of the schools that would be part of the 1982-83 demonstration effort.

Interagency Coordination at the State Level

According to the original enabling legislation, Chapter 50 of the Laws of 1981, the demonstration was a joint undertaking of the New York State Departments of Health, Education, and Social Services, with operational responsibility resting with the Department of Health. Interagency coordination and cooperation were critical, since the health of school-aged children is a concern that cuts across the boundaries of these three agencies. By July 1981, the commissioners of DOH, SED, and DSS had signed a memorandum of understanding, as required by Chapter 50, to ensure effective implementation of the program. Each agency then attended to those functions under its jurisdiction necessary for program implementation. The Department

of Health, for example, had to waive sections of the Public Health Law so that the Article 28 facilities would be able to operate at the school site and bill for third-party reimbursement. The State Education Department had jurisdiction for the role of the nurse practitioner; by incorporating these projects under provisions established in Chapter 198 of the Laws of 1978, registered professional nurses were authorized to expand their usual practice to include diagnosis, treatment, and dispensing prescriptions in collaboration with a physician. The Department of Social Services' role encompassed approval of the demonstration projects under Chapters 50 and 198 and involvement in establishing procedures to enable programs to receive Medicaid reimbursement at specially approved rates.

To facilitate state-level communication and coordination, the School Health Interagency Committee was established and convened periodically. The committee consisted of representatives from three State agencies and the Council on Children and Families.

Intra-Agency Coordination

The following health agencies played a role in the SHDP:

- New York State Department of Health
 - Division of Program and Policy Development and Evaluation
 - Bureau of Maternal and Child Health
 - Regional Offices of Public Health (NYC, Buffalo, and Rochester)
 - Bureau of Ambulatory Care
 - Bureau of Dental Health
- New York City Health Department
- Monroe County Health Department
- Erie County Health Department

Agreements between the State and county/city health departments regarding the following issues were also negotiated during the implementation stage of the project:

- identifying the agency that would have ultimate responsibility for seeing that the mandated care was delivered and for monitoring the quality of that care
- determining which information the projects would continue to collect and how reporting and record keeping would be handled
- determining the extent to which city/county health resources previously provided to the participating schools would remain in the schools and, if any resources were removed, how they would be redistributed during the demonstration period and at its close
- determining a process for regular communication between the agencies

Other Implementation Tasks

The list of tasks in Figure 3.1 identifies some of the other major types of activities conducted by DOH and the projects during the implementation phase. It should be understood that since the projects were not all alike in terms of programs, resources, and internal organization, the implementation activities differed to some extent. Moreover, the strategies used to accomplish these tasks differed among projects. The activities included in Figure 3.1 represent the most common types of activities conducted and, as such, represent tasks to be considered in planning a possible replication.

The ease with which the local-level tasks were accomplished varied from grantee to grantee, depending on factors such as prior relationship between the Article 28 backup facility and the community, characteristics

FIGURE 3.1

Implementation Tasks

NYS Department of Health	Article 28 Health Facility	School District	Schools
● Sign a memorandum of understanding with the Departments of Education and Social Services. ● Promulgate regulations in the NYS Health Codes for the demonstration. ● Establish Medicaid rates for school health services. ● Develop the RFP with DSS and SED. ● Select the grantees in conjunction with DSS and SED. ● Negotiate contracts with Article 28 facilities. ● Review and approve budgets. ● Review and approve staff. ● Review and approve medical protocols. ● Establish reporting requirements and provide technical assistance. ● Provide training and technical assistance. ● Coordinate with the NYS Pharmaceutical Board to notify local pharmacies of the names of the NPs who would be writing prescriptions.	● Negotiate contract with NYS DOH. ● Establish school health advisory committees. ● Negotiate memorandum of understanding with school district. ● Hire and train staff. ● Develop medical protocols. ● Equip and decorate the health room. ● Gain access to children's school health records. ● Develop enrollment materials. ● Establish data management system. ● Conduct public relations activities for introducing the program. ● Develop continuing medical education program.	● Negotiate memorandum of understanding with Article 28 health facility. ● Develop procedures for regular information exchange. ● Assist in planning enrollment drives.	● Prepare space for the health office. ● Establish operational protocols for day-to-day activities and special situations (e.g., child abuse reports, emergencies). ● Inform parents and teachers about the program.

of the leaders, and resources available to the backup facility. Seven of the nine projects were able to enroll children in their projects between April and June 1982, although in some cases not every school was involved. These seven projects were the Bronx-Lebanon Consortium, East Harlem Council, Harlem Hospital, Hunts Point Multi-Service Corporation, Jamaica Hospital, Lutheran Medical Center, and Lyndon B. Johnson Health Complex. Implementation of all the projects took longer than initially anticipated by either the State or the grantees.

Implementation Barriers and Accomplishments

During the 1982-83 school term, the nine grantees had taken the steps needed to enroll children and deliver primary care in a total of 55 schools, Head Start centers, and day care centers in three cities. The evaluation/management data collection system had been developed and technical assistance had been provided to the grantees as needed.

Potentially the most significant barrier to implementation was posed by several unexpected decreases in allocation levels for the demonstration projects. These decreases necessitated the elimination from the SHDP of several schools that had been targeted for participation. Subsequent decisions to expand the program to nonpublic schools delayed contracts between the State and the Article 28 facilities until reasonable solutions were negotiated.

Attracting qualified nurse practitioners and physician's assistants to low-income neighborhoods at the proposed salary levels proved extremely difficult for a number of projects despite creative recruitment

efforts. The projects also faced difficulties in identifying all of the children enrolled for levels 2 and 3 in the SHDP who were covered by Medicaid, and obtaining the complete, correct Medicaid number.

Finally, there were some obstacles related to developing uniform program elements and reporting standards. Although the broad guidelines in the RFP gave projects some flexibility in developing approaches that were both responsive to perceived community needs and resources and consistent with the goals of their centers, the Department had to work with certain projects to ensure that their programs were actually demonstrating innovative programs that were responsive to the intent of the RFP. Moreover, implementing a standard reporting system also created difficulties for projects that had their own unique information systems, often integrated with their billing processes as well as other reporting requirements.

Despite these obstacles, and others unique to specific grantees, significant progress had been made by September when the school term began, as described in the following section.

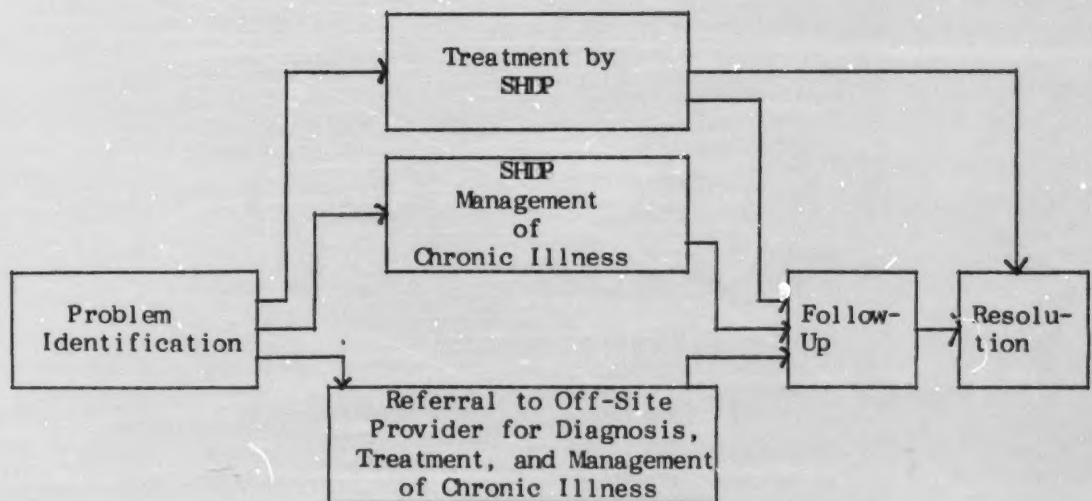
4 ACHIEVEMENT OF OBJECTIVES

The School Health Demonstration Program was undertaken to achieve four objectives:

- To ensure adequate access to appropriate and comprehensive health care services
- To identify and manage health-related problems
- To provide primary care services
- To encourage disease prevention and health promotion

In the following discussion, the findings related to the achievement of the access and health promotion objectives are addressed individually. The findings related to problem identification and service provision are addressed together, since they are part of an interrelated process, as depicted in the following figure:

Figure 4.1
SHDP Health Services Process



Impact of SHDP on Children's Access to Health Care

The first of the four major objectives of the SHDP was to improve children's access to health services, particularly preventive services. For this evaluation, impact on access was measured in terms of the availability of SHDP services to children, the levels of enrollment in the program, and children's access to services by virtue of their financial resources and reported regular sources of medical care.

The presence of the SHDP in the school--providing State-mandated services to all children regardless of formal enrollment in the program--immediately increased children's access to health care. At any one point in time during the school year, at least 36,000 children had access to a medical team that provided screening, responded to minor complaints, and could refer children for diagnosis and treatment of more complex conditions. Given the reportedly large numbers of pupils moving into and out of these school districts during the term, the number of children exposed to the SHDP at some time during the school term was greater than 36,000. Regrettably, we do not have the necessary data to calculate the average length of time that children were enrolled in the program.

School Health Services Prior to the SHDP

According to the reports of school principals and the SHDP project directors in New York City, NYC Health Department staff resources were meager in the years immediately preceding the demonstration. Moreover, according to these reports, the record-keeping responsibilities of the NYCHD staff severely limited their direct availability to students.

Table 4.1 illustrates the extent of the problem. Prior to the SHDP, during the 1981-82 school term, 38 of the New York City schools that later participated in the SHDP had received, in all, the equivalent of 9.4 weeks' time from physicians, 19.2 weeks' time from pediatric nurse associates, 82.4 weeks' time from nurses, and 47.7 weeks' time from public health assistants. By contrast, the SHDP provided schools with health personnel on a regular basis. The mid-level practitioner and health aide comprised the core staff at the schools, with physicians rotating among schools. During the 1982-83 school term, the demonstration supported 33 FTE mid-level practitioners and 35 FTE school health aides in the 44 New York City schools.

Table 4.1

Total Amount of Time Spent in 38 Selected Schools
by NYC Health Department Professionals
Prior to the SHDP
September 1981-June 1982

	<u>Total Hours</u>	<u>Total Weeks (37.5 hr/wk)</u>	<u>FTE</u>
Physicians	352	9.4	.2
Pediatric Nurse Associates	741	19.2	.4
Nurses	3,092	82.4	1.6
Public Health Assistants	1,789	47.7	.9

Source: NYC Department of Health.

Prior to the SHDP and in the absence of health staff, teachers, principals, and their office staff had handled students' day-to-day health complaints and accidents. Screening for vision, hearing, and height and weight, when provided, were conducted chiefly by teachers. Parents were informed by health professionals and school staff when needs were identified, but the school had limited resources for follow-up. Subsequently, because the SHDP team was available at the school more hours than the city health personnel could be, given the constraints of municipal resources, all children attending demonstration schools were exposed to more--and better-quality--screenings, more professional triage for health complaints, and more extensive follow-up than were previously available. In addition, children who were enrolled in the SHDP had access to enriched services.

SHDP Enrollment

Actual enrollment in the SHDP is used in this study as another indicator of improved access to health care. As shown in Table 4.2, the net enrollment in the SHDP by the end of June 1983 was 22,689, or 63 percent of all children attending the participating schools.* SHDP enrollment appears to have grown most rapidly during the early phase of the program, when most projects conducted special enrollment initiatives to reach parents. As the term progressed, enrollment leveled off. According to grantee reports, enrollment occurred in seven of the projects as early as April 1982. By the end of November 1982, 49 percent of all eligible children were enrolled in the program. By the end of February 1983, enrollment had jumped to 60 percent, leveling off to 63 percent by the end of the school year.

* Net enrollment is the total number of children formally registered in the SHDP minus those children who have left the school or dropped out of the program (if any).

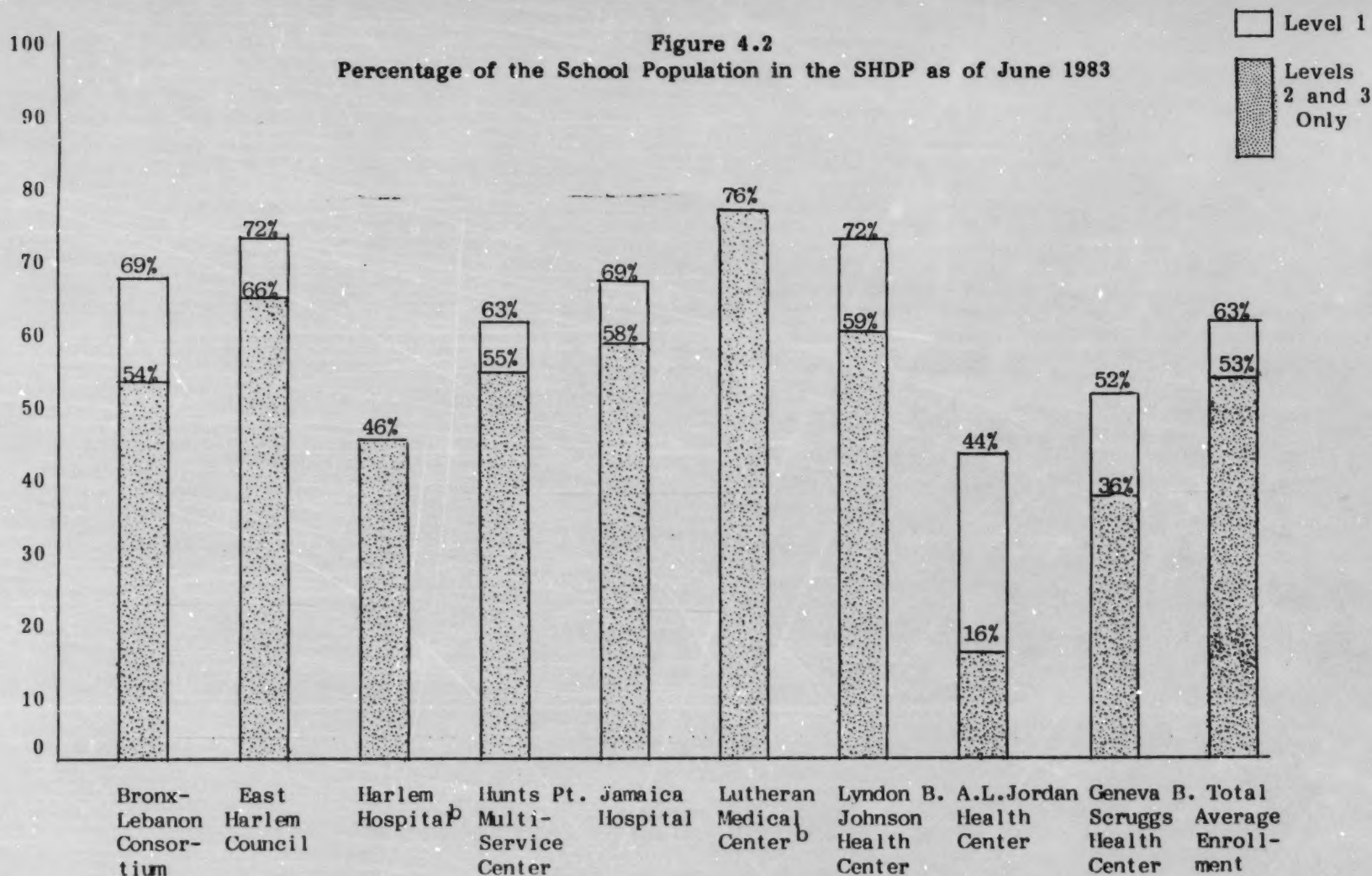
TABLE 4.2
School and SHDP Enrollment as of June 1983

<u>Projects</u>	<u>Number of Schools</u>	<u>Total Student Population</u>	<u>Total SHDP Enrollment</u>	
			<u>Number</u>	<u>Percent</u>
Bronx-Lebanon Consortium	5	4,736	3,249	69%
East Harlem Council	6	3,772	2,726	72%
Harlem Hospital	7	4,159	1,929	46%
Hunts Point Multi-Service Center	5	2,819	1,785	63%
Jamaica Hospital	8	3,263	2,262	69%
Lutheran Medical Center	5	5,014	3,826	76%
LBJ Health Center	8	4,160	3,007	72%
A.L. Jordan Health Center	4	4,061	1,783	44%
Geneva B. Scruggs Health Center	<u>7</u>	<u>4,047</u>	<u>2,122</u>	<u>52%</u>
Total	55	35,986	22,689	63%

- a. This figure does not include children discharged from the program from March to June.
- b. This figure includes enrollment in Levels 2 and 3, since there is no formal enrollment into Level 1.
- c. The SHDP expanded into the high school in March 1983, almost doubling the school population eligible for the program. The total SHDP enrollment for the December-February had been 57, percent but because of the addition of students, the percentage enrolled in the SHDP declined.

The majority (60%) of the children that enrolled in the SHDP were enrolled for complete care. Another 23 percent were eligible for comprehensive physical examinations. Figure 4.2 illustrates the SHDP enrollment as a percentage of the entire school population. The shaded portions of the bars represent the percentage of schoolchildren whose parents enrolled them for more than the usual health services.

Figure 4.2
Percentage of the School Population in the SHDP as of June 1983



- a. Enrollment figures include only those children for whom signed consent forms for any level of care were returned. It should be noted that the entire student population is eligible for Level 1 services (i.e., first aid, immunization, response to minor complaints, screenings, and referral/follow-up) regardless of whether there is a signed consent.
- b. SHDP enrollment for the Lutheran and Harlem projects includes Levels 2 & 3 only since no formal enrollment process is conducted for Level 1 students; as in all other schools in the SHDP, however, all students who do not return signed consent forms are considered eligible for Level 1 care.

As can be seen in Table 4.3, in all of the projects, with the exception of A.L. Jordan Health Center and Harlem Hospital, the majority of the participants were enrolled in Level 3, with the proportions ranging from 54 percent at the Scruggs Health Center to 87 percent at the Lutheran Medical Center. The Jordan and Harlem projects had developed an approach that emphasized the linking of children to existing primary care providers in the community rather than at the school site and ensuring that needed care was received. Except in a case where a community provider could not be identified, these projects did not enroll children in Level 3; therefore, their enrollment figures are lower than those of other projects.

Coverage by Medicaid

Access to care is affected by financial status as well as health insurance coverage. In the study population it can be assumed that virtually all families would experience barriers to purchasing medical care unless they had some kind of medical insurance, because the sites were all in low-income communities. According to grantee reports, approximately 50 percent of the children enrolled in Levels 2 and 3 of the SHDP were covered by Medicaid (MA) at the time of enrollment. Therefore, we can infer that most of the remaining children, lacking this subsidy, had more limited financial access to health services.

There is probably some degree of underreporting of MA eligibility by parents for reasons such as the following: (1) children are eligible for services regardless of Medicaid coverage or ability to pay, and (2) parents may be reluctant to admit that they are eligible for Medicaid. Thus, the number of children actually covered by Medicaid is probably higher than 50 percent, but we do not know how much higher.

TABLE 4.3
SHDP Enrollment for the Three Levels of Care
as of June 1983

<u>Projects</u>	<u>Total SHDP Enrollment</u>	<u>Level 1</u>		<u>Level 2</u>		<u>Level 3</u>	
		<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Bronx-Lebanon Consortium	3,249	699	21%	699	21%	1,851	57%
East Harlem Council	2,726	238	9%	222	8%	2,266	83%
Harlem Hospital	1,929	0	0%	1,929	100%	0	0%
Hunts Point Multi-Service Center	1,785	230	13%	226	13%	1,329	74%
Jamaica Hospital	2,262	383	17%	235	10%	1,644	73%
Lutheran Medical Center	3,826	0	0%	503	13%	3,323	87%
LBJ Health Center	3,007	548	18%	708	24%	1,751	58%
A.L. Jordan Health Center	1,783	1,115	63%	392	22%	276	15%
Geneva B. Scruggs Health Center	<u>2,122</u>	<u>647</u>	<u>30%</u>	<u>322</u>	<u>15%</u>	<u>1,153</u>	<u>54%</u>
Total	22,689	3,860	17%	5,236	23%	13,593	60%

Definitions of Level of Care:

- Level 1: First aid, response to minor complaints, immunizations, mass screenings, referral and follow-up.
 Level 2: Level 1 plus complete physical examination including laboratory tests.
 Level 3: Levels 1 and 2 plus care for acute and chronic illness.

NOTE: Percentages may not total to 100% due to rounding error.

a. Estimates.

b. Harlem Hospital and Lutheran Medical Center do not have formal enrollment into Level 1. All children are considered eligible for Level 1 care if they are enrolled in the school.

One of the questions raised early in the demonstration by program planners and policymakers was whether the project would be especially appealing to families whose incomes were just above Medicaid eligibility standards. That is, it was conjectured that students covered by Medicaid might already have access to a physician, so that their parents would choose not to join the SHDP. Medically indigent families, it was thought, might be more likely to enroll their children in the SHDP, and might also choose the most comprehensive level-of-care option (Level 3).

Unfortunately, no data were available on the insurance coverage of the 37 percent of the children not enrolled in the SHDP. But for children enrolled in the program, coverage by public insurance bears some relationship to the level of care selected by the parents, as shown in Table 4.4. Contrary to expectations, the proportion of Level 3 children who were covered by Medicaid was greater than for those not covered, and the proportion of children in Levels 1 and 2 who were covered by Medicaid was slightly smaller than for children not covered. (These data were derived from a selected sample of children attending eleven schools in five projects.)

TABLE 4.4
Distribution of SHDP Enrollees by
Level of Care and Medicaid Status
(N = 2,018)

	Covered by Medicaid		Not Covered by Medicaid		Total	
	Number	Percent	Number	Percent	Number	Percent
Level 1	310	46%	362	54%	672	100%
Level 2	127	47%	145	53%	272	100%
Level 3	611	57%	463	48%	1,074	100%
Total	1,048	52%	970	48%	2,018	100%

Source: Records of a sample of SHDP enrollees in the following projects and schools: Bronx-Lebanon: PS 55, PS 73; East Harlem: PS 96, JHS 45; Lutheran: PS 314, St. Michaels; LBJ: PS 282, Tabernacle Day Care; A.L. Jordan: PS 9, Ben Franklin Jr./Sr. HS, St. Stanislaus.

Previous Regular Primary Care Provider

WRI attempted to ascertain the extent to which children were already receiving services from a primary care provider at the time that they were enrolled in the SHDP. The purpose of this inquiry was to determine whether the program was (1) reaching children who had no regular provider; (2) replacing an inappropriate regular source of care, such as a hospital emergency room, with a more appropriate source; or (3) replacing one appropriate source with another.

The SHDP staff were asked to collect information on the family's usual type of primary care provider at the time of enrollment in Levels 2 and 3 and to report this information with routine summary reports. Project staff informed us that often no one usual source of primary care could be identified by families; rather, the provider was selected on the basis of availability (doctors during weekdays, emergency rooms on evenings and weekends) or medical problem. The findings in Table 4.5 should be regarded as very preliminary due to the large number of cases for which no provider or no answer was reported and the difficulty that staff had in collecting these data. A more rigorous examination of enrollees' prior access to health care is recommended.

Out of 1,700 new SHDP enrollees during March-June 1983, parents of 6 percent of the children identified the hospital emergency room as their regular provider. For 12 percent of the enrollees hospital ambulatory clinics were the regular care providers. Health centers (38%), private doctors (4%), and other sources (6%) were also reported as regular care providers. Parents of 34 percent of the enrollees either did not answer the question or reported no regular source of medical care.

TABLE 4.5
Distribution of New SHDP Enrollees by
Regular Primary Care Provider
March-June 1983

	<u>Number</u>	<u>Percentage</u>
Hospital emergency room	109	6%
Hospital ambulatory clinic	204	12%
Neighborhood health center	648	38%
Private doctor	61	4%
Other	104	6%
No provider or no answer	<u>574</u>	<u>34%</u>
Total	1,700	100%

Source: Enrollment Status Report March-June 1983 for all projects except Geneva B. Scruggs.

The use of the emergency room as the regular provider was reported most often in the Harlem Hospital, Jamaica Hospital, and LBJ Health Center projects. In these projects, the percentage of newly enrolled children for whom the ER was reported to be the regular source of primary care was 18 percent, 15 percent, and 14 percent respectively. The change from an emergency room visit to a school-based ambulatory care program for regular health care should represent an opportunity for greater continuity of care at lower cost.

Summary

The potential for increased access to health care as a result of the SHDP has been discussed in terms of the availability of services at the school site and reported previous utilization of providers in the community. The actual utilization of health services is covered in the following sections of this report. The impact of access to school health services on the overall pattern of community health resource utilization is the subject of a separate evaluation study; that study will compare the services utilization of Medicaid-covered children who use the SHDP with that of a comparison group of children.

Problem Identification and Services

The SHDP provided 83,602 student-staff encounters during the 1982-83 school term. According to the SHDP definition, an encounter entails personal contact with a child. Many additional contacts were made with parents, principals, and teachers about schoolchildren.

During a single encounter a variety of services may be provided to a child. For reporting purposes, services are categorized and defined as follows:

- Comprehensive physical exams, including medical history, medical examination, laboratory tests, screening, and immunization. (See page 8 for a list of the minimum elements of the comprehensive physical.)
- Primary care visits--preventive care, minor medical diagnostic services, medical treatment rendered by mid-level practitioner or physician.
- Follow-up visit--a visit to treat or assess the status of a condition previously evaluated or diagnosed by a medical professional. Such conditions must be serious enough to warrant re-evaluation by a mid-level practitioner or physician.
- Immunization/vaccination.
- Mass screenings--screening groups of children for vision, hearing, height and weight, scoliosis, pediculosis, blood pressure, etc.
- Response to minor complaints--the treatment of minor cuts, scrapes, sprains, bumps, bruises, and general symptoms that can be treated by a health aide.
- Other visits, including psycho/social encounters between a professional counselor and student, management of chronic illness (e.g., dispensing medication for asthma), and counseling, in which advice, instruction, or health education is given to students individually.

Table 4.6 presents summary health services statistics for the projects. During the 1982-83 school term, 7,212 children received comprehensive physical examinations in the schools; 2,119 immunizations were administered, and more than 38,000 mass screenings were conducted (in addition to screenings that were part of the comprehensive physical). By grantees' own reports, approximately 22,000 visits involved the provision of primary care, and approximately 15,000 encounters were for minor complaints. It should be noted, however, that grantees differed in their interpretation of "primary care" as opposed to "response to minor complaints" when services were rendered by a mid-level practitioner. (A discussion of the reasons for visits and the services rendered can be found later in this chapter.)

Projects could not readily calculate the number of children who received care from the SHDP, because the record system is visit-oriented. A primary reason for conducting the sample survey, therefore, was to obtain an estimate of the number of children served by the project. More specifically, the evaluation team hoped to determine how many children received health services excluding mass screenings, since theoretically all children were to be screened annually. As shown in Figure 4.3, 34 percent of the schoolchildren visited the health office during the period September-March for reasons other than screening. Based on this figure we would estimate that by the end of the school term approximately one half of the schoolchildren had encounters for reasons other than mass screening. A large number of students (41%) made only one visit to the health office, almost a third of the children made two or three visits, and 23 percent made between four and ten visits. Twenty-eight children had between 11 and 25 encounters with the

TABLE 4.6
Summary Health Services Statistics
for Projects
September 1982 - June 1983

	Encounters	Physical Examinations				Services Provided ^a		
		Physical Examinations	Primary Care	Follow-Up	Immunizations	Screenings ^b	Minor Complaints	Other ^c
Bronx-Lebanon Consortium	14,655	565	5,628	2,389	261	4,529	2,607	2,664
East Harlem Council	8,495	886	3,287	1,094	309	1,348	2,131	451
Harlem Hospital	14,838	1,245	3,128	745	276	11,014	3,368	428
Hunts Point Multi-Service Center	4,669	561	1,215	966	98	2,818	286	578
Jamaica Hospital	9,184	241	2,212	618	214	5,505	964	3,715
Lutheran Medical Center	14,369	953	2,504	1,654	308	9,979	1,159	772
Lyndon B. Johnson Health Center	7,696	1,117	2,639	1,028	429	749	1,782	501
Anthony L. Jordan Health Center	1,673	471	188	291	40	0	364	356
Geneva B. Scruggs Health Center	8,023	1,173	1,572	336	184	2,572	2,394	294
TOTAL	83,602	7,212	22,373	9,121	2,119	38,514	15,055	9,759

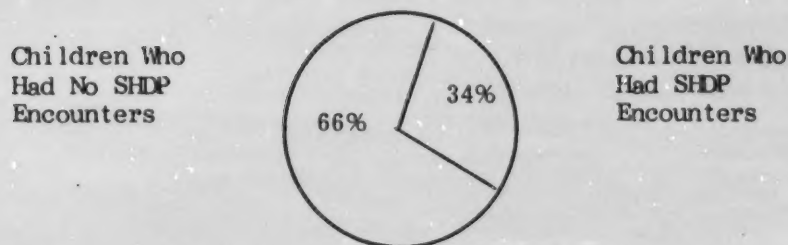
- a. During a single encounter more than one service may be provided.
- b. Includes mass screenings mandated by city/county health departments and other group screenings.
- c. Includes psycho/social visits, counseling/education services, and management of chronic illness.
- d. Screenings are primarily conducted by the Chancellor's Project personnel, assisted by SHDP staff as necessary.
- e. Counseling/Education accounted for 3,141 services.
- f. These activities are primarily conducted by the Monroe County Health Department personnel, assisted by SHDP staff as necessary.

SHDP team. According to the teams, most of the frequent visits were made by children who needed medication, but a significant number of the children who were frequent visitors complained of minor problems that were clearly more indicative of social/emotional than of physical problems.

Figure 4.3

Percentage of Children Who Had
SHDP Encounters
(excluding screening)

September 1982 - March 1983

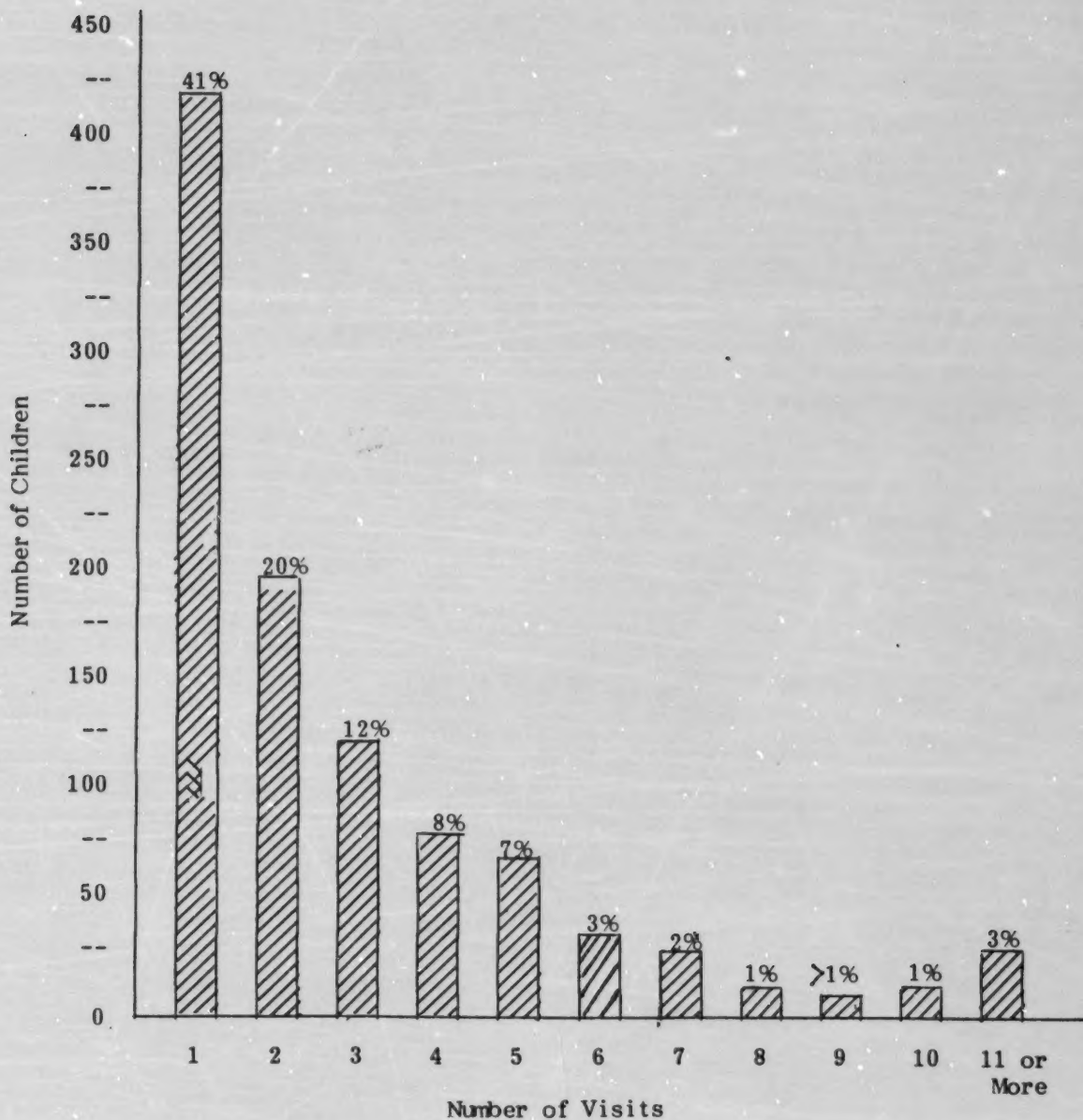


Source: Sample survey (N = 2,971).

Fifty-one percent of the children who visited the health office were girls and 49 percent were boys. The distribution of visits per child is depicted in Figure 4.4. The distribution of visits by level of care was similar to the SHDP enrollment distribution. More than half (56%) of the visits (excluding screening) were for children in Level 3; 9 percent, in Level 2; 12 percent, in Level 1; and 23 percent, unenrolled. This suggests that care is not being rendered disproportionately to any one enrollment group. Likewise, children who were covered by Medicaid visited the health office in proportion to their numbers in the sample. That is, 58 percent of the SHDP enrollees in the sample were covered by Medicaid, and 62 percent of the visits were by children who were covered by Medicaid.

Figure 4.4

Percentage and Number of Children in Sample
Who Made 1-26 Visits
September 1982 - March 1983



Source: Sample study (N = 997).

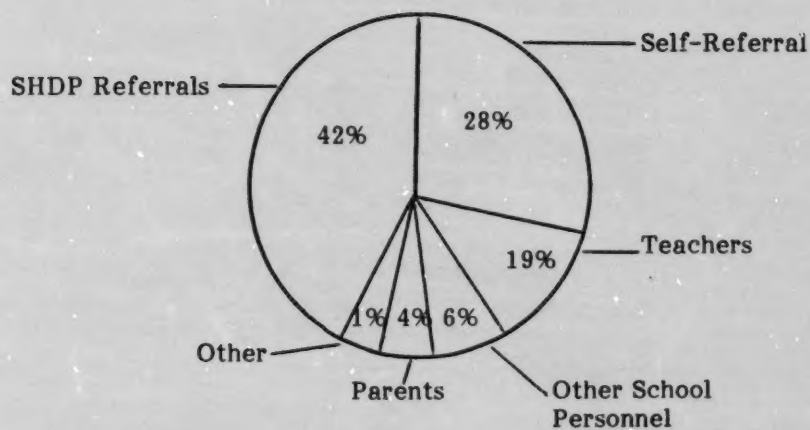
Source of Request for SHDP Care

There are a number of potential sources of request for SHDP care. A child may refer him/herself because (s)he has been injured or is not feeling well. Parents may request care for their child in response to a particular problem, and in a sense they are generating the contact for a complete physical examination when they enroll a child in Level 2. (In their monthly reports, some SHDP projects consider their staff to be the initiators of physical examinations because they make the appointments, while others consider the parents to be the initiators because they have returned consent forms.) The SHDP typically initiates treatment, screenings, physical examinations, lab tests, and follow-up care. Teachers and other school personnel (e.g., principals and school-based support team members) may also be referral sources.

Data about referral to the SHDP were reported by the projects on their Health Services Reports.

In the SHDP, the health team was the referral source for 42 percent of the encounters. Self-referral accounted for 28 percent; and teachers, 19 percent. It appears that parents rarely refer their children to the health office, since they are reported as initiating only 4 percent of the encounters. Although we anticipated an increase in the proportion of visits generated by parents as they became more familiar with the SHDP health team and its services, the data indicate that the proportion of parent referrals remained approximately the same for each of the three reporting periods. One year, however, may be too short a time period in which to begin to see such a change. Referral sources for the SHDP during the 1982-83 school term are depicted in Figure 4.5.

Figure 4.5
Sources of Request for Health Care
Provided by SHDP
(N = 74,694)



Source: Health Services Reports.

The value of the SHDP for children and the importance of the linkage between teachers and the SHDP is illustrated by the following case study:

Donald's teacher noticed that he had difficulty responding to lengthy questions and referred the second-grader to the SHDP. The team reviewed Donald's records and discovered that he had failed hearing exams the two previous years. They also learned that Donald was nine and had repeated first grade twice. The SHDP referred him to the Manhattan Eye, Ear, and Throat Hospital. Upon an evaluation, the hospital found that Donald had fluid in the middle ear. Donald underwent surgery and now shows improved academic performance.

Problem Identification

Children are identified as having health problems by three routes: mass screening, comprehensive physical examinations, and visits to the health team initiated by the students themselves or others.

Mass Screening

Mass screening in New York State is mandated for schoolchildren; however, the type, frequency, and target group vary according to the group having jurisdiction over school health. In New York City, vision screening is mandated annually for all children in grades K-12; hearing screening, for grades K-7 and 10; and scoliosis screening, for children between the ages of 8 and 16 years. In Erie County, where Buffalo is located, vision, hearing, and height and weight screenings are mandated annually for all children in grades K-12, and scoliosis screening is mandated for sixth- and seventh-graders. Monroe County mandates vision screening for grades K-3, 5, and 9; hearing screening, for grades K-3 and new entrants; and scoliosis screening, for children in the ninth and tenth grades. The State Education Department, which is responsible for school health in all other counties, mandates annual vision and hearing screenings for children in grades K-12 and scoliosis screening for children between the ages of 8 and 16 years.

According to grantee reports, screening has been a major SHDP priority. Forty-six percent of all encounters involved screening activities. Approximately 38,500 screenings were performed by SHDP staff, and additional screenings were conducted during the comprehensive physical examinations, as well as by other personnel during the 1982-83 school year.

At the East Harlem Council project, mandated screenings were conducted primarily by personnel from the Chancellor's Project, the Board of Education's school health demonstration that was also present in the school. In the Anthony L. Jordan Health Center's schools, mandated screenings were conducted by staff from the Monroe County Health Department.

The three charts that follow show the number of vision, hearing, and height and weight mass screenings that were conducted. Screenings that were conducted as part of a comprehensive physical examination are not included in these figures. Mass scoliosis screening (of 247 children) was reported only by the Geneva B. Scruggs project.

As the tables show, screening was a major thrust of five of the seven projects that were responsible for this activity: the Bronx-Lebanon Consortium, Harlem Hospital, Hunts Point, Jamaica Hospital, and the Geneva B. Scruggs project.

To calculate the proportion of schoolchildren screened by the end of the school term, we divided the number of screenings conducted by the total school population reported at the last reporting period. The figures reported therefore do not take into account the turnover rate, which is reportedly high in these schools. Thus, the total percentage of schoolchildren screened is probably an overestimate, since the denominator does not include the number of children who were in school for only a part of the term, whereas the numerator (number of children screened) may include these children.

Figure 4.6^a
Percentage of Schoolchildren That Received SHDP Mass
Vision Screening

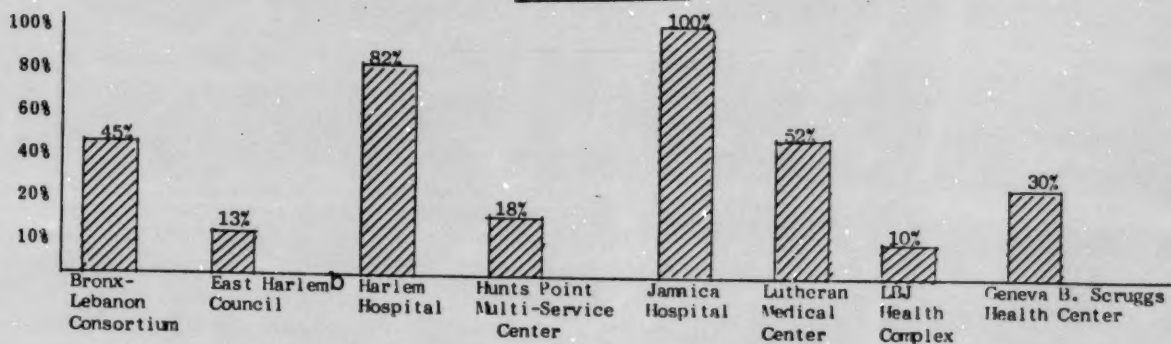


Figure 4.7
Percentage of Schoolchildren That Received SHDP Mass
Hearing Screening

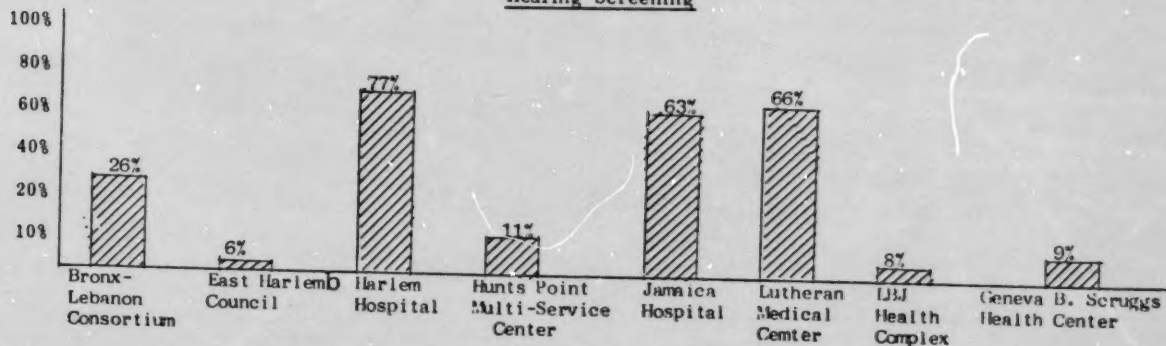
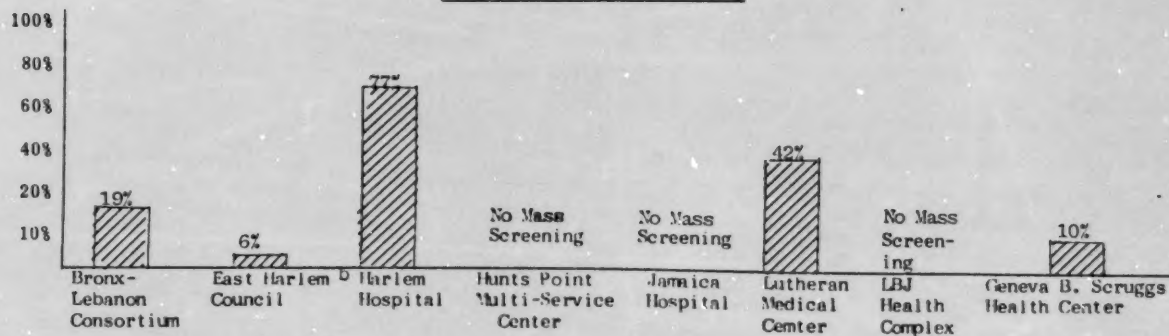


Figure 4.8
Percentage of Schoolchildren That Received SHDP Mass
Height and Weight Screening



- a. The A.L. Jordan project does not appear in this figure because screening activities are conducted by the Monroe County Health Department.
- b. Screening activities are conducted primarily by the Chancellor's Project.

A total of 2,303 abnormal conditions were identified through the mass screenings for vision, hearing, and height and weight. According to one project director, the abnormal findings tend to be especially high among children in special education classes. Vision and hearing screening has been an important component of most school health programs because of the negative impact that deficits in these senses can have on children's capacity to learn. Through mass screening, the SHDP identified 2,272 cases in which deficiencies were evident. As shown in Table 4.7, the percentage of abnormal findings varies markedly among projects. There are also reportedly significant variations among schools within a single project.

TABLE 4.7
Percentage of Abnormal Findings in
Vision and Hearing Screening by Project

<u>Project</u>	<u>Vision</u>	<u>Hearing</u>
East Harlem Council	12%	4%
Harlem Hospital	11%	2%
Hunts Point Multi-Service Center	10%	14%
Jamaica Hospital	13%	2%
Lutheran Medical Center	17%	7%
LBJ Health Complex	16%	7%
Geneva B. Scruggs Health Center	18%	1%

Source: Health Service Reports.

Children who do not pass screening criteria are referred elsewhere for further evaluation and treatment. Often, mid-level practitioners and health aides must make many contacts with families to ensure that children's needs have been met. Prior to the SHDP, the resources needed to conduct effective follow-up were severely limited.

School health staff reported that they performed other types of screening procedures that were not mandated. Dental screening was conducted at three projects: Lutheran Medical Center, Hunts Point Multi-Service Center, and Harlem Hospital. Four grantees administered a total of 371 tine tests. A total of 1,632 pediculosis (lice) screenings were also conducted in projects, in response to the sporadic pediculosis outbreaks in the school population. Other types of screening conducted included blood pressure, sickle cell anemia, and scoliosis.

Comprehensive Physical Examination

The School Health Demonstration Program conducted 7,212 comprehensive physical examinations during the school term. These examinations routinely included health histories, laboratory studies such as hematocrit, urinalysis testing, and if indicated, tuberculosis testing. In New York City, physical examinations are mandated for all new entrants to the school, as well as for pupils wishing to participate in certain sports and those wanting to obtain working papers. Routine physical examinations are also, of course, recommended preventive health care practice.

A total of 18,829 children were eligible for physical examinations by virtue of their level of enrollment in the SHDP (Levels 2 and 3). Of these, 38 percent received comprehensive physicals. We do not know, however, how many of those who were not examined had been examined recently by their own doctors or the number who did not fall in the group for whom physicals were mandated.

One of the key questions raised in the debate over the effectiveness of school health programs concerns the extent to which schoolchildren are in need of expanded services. Data from our sample study of school site utilization indicate that of the 315 children who received comprehensive examinations almost one-fifth (18%) were referred to outside providers, accounting for close to a third of all referrals made by the SHDP. We do not know how many of the conditions for which these children were referred would have been picked up by a cursory health inspection. Nevertheless, the relatively large proportion of examinations that led to referrals attests to a high level of need in these schools.

The following case study illustrates the effectiveness of the SHDP in identifying problems during the physical examination that had previously gone untreated:

Jasmine, aged 10, was accompanied to her physical examination by her mother and grandmother. During the health history the grandmother mentioned that Jasmine had been wetting the bed approximately every other night for a period of two years. The nurse practitioner recommended a medical and behavior modification regimen that consisted of a medication that would enhance bladder control and behaviors such as voiding before bed, restricting fluids, and waking the child to void during the night. The family was asked to maintain a record of bedwetting incidents. After six weeks, the combined program was successful, resulting in an increase in Jasmine's feelings of self-confidence and the mother's and grandmother's pride and sense of accomplishment.

According to our sample data, half of the children who received physicals were covered by Medicaid. This finding indicates that, contrary to an initial concern, programs did not neglect medically indigent children needing services in favor of those who could generate revenue for the program through reimbursement.

Other Visits to the Health Room

In addition to screenings and physical examinations, the SHDP identified children's health problems in the course of visits to the health room for other reasons. Grantees reported approximately 15,000 episodes that involved simple first aid or other minor care. In addition, approximately 22,400 primary care services were reported. (Because the term "primary care" has many definitions, we know that some of the encounters reported as primary care were actually responses to minor complaints.)

Staffing Patterns

The core team consisted of the mid-level practitioner, the health aide, and the family practice physician. Over all, NPs and PAs were distributed in the schools in the ratio of one to slightly more than 1,000 students. Having identified the other internal and external staff resources available, each project worked through its own process for delegating the activities that the different types of staff would perform. In cases where city/county health department staff also provided school health programs, and in East Harlem, where the Chancellor's Project was in the school, more formal cooperative agreements were developed.

In general, the mid-level practitioners' major activities included physical examinations, immunizations, problem assessments, follow-up, health counseling, charting, conferences, reporting, and other administrative tasks. Physicians provided consultation and assessments for the more complex cases. Health aides administered first aid and provided assistance in mass screening, follow-up, record keeping, and reporting.

Findings from the sample study indicate that mid-level practitioners provided most of the direct care excluding mass screening. Nurse practitioners and physician's assistants alone handled 79 percent of the visits; health aides, 10 percent; a combination of the two, 7 percent; and physicians, 4 percent. Our data do not provide information regarding the staffing patterns for the other activities related to direct care (such as contacting parents and providers) that engage a great deal of staff time and attention.

Conditions Seen On-Site

Complaints of children who visit the health office are categorized according to a taxonomy developed by the Bureau of Maternal and Child Health. The definitions of these categories are available to SHDP staff in the glossary of the Guide to Completing the School Health Services Project Daily Visit Log and Off-Site Referrals Log. (See Appendix E.)

Table 4.8 lists the presenting complaints in rank order by the frequency with which each category was reported during the school term. The most frequent category reported was skin conditions (22%), a category that included two common complaints--ringworm and pediculosis--and that evidently was used by SHDP staff for coding scrapes and minor lacerations as well. Fifteen percent of the conditions were categorized as general symptoms, signs, and ill-defined conditions, a catch-all category for conditions such as fever of unknown origin, fainting, nausea, headaches, and some stomach-aches. Since some projects reported headaches as neurological problems, the actual frequency of complaints in this category is probably closer to 17 percent. Eye disorders were the third most frequently reported category,

TABLE 4.8
Distribution of Presenting Complaints
(September 1982 - June 1983)

<u>Complaint Category</u>	<u>Number</u>	<u>Percent</u>
1. Skin conditions (includes pediculosis)	7,942	22%
2. General symptoms, signs, and ill-defined conditions	5,475	15%
3. Eye disorders	4,910	14%
4. Musculoskeletal disorders	3,061	8%
5. Gastrointestinal	2,986	8%
6. Ear disorders	2,835	8%
7. Nose and throat	2,220	6%
8. Immunization/vaccination	1,403	4%
9. Respiratory	1,320	4%
10. Social behavioral problems/mental disorders	655	2%
11. Neurological disorders	629	2%
12. Infections - general	545	1%
13. Dental	517	1%
14. Genitourinary	497	1%
15. Acute injury	407	1%
16. Allergic disorders	301	1%
17. Nutrition	239	1%
18. Heart and cardiovascular	222	1%
19. Blood disorders	174	<1%
20. Endocrine	11	<1%
Total	36,349	100%

Source: Health Services Reports from all projects except the Bronx-Lebanon Consortium. Figures from the Geneva B. Scruggs project for September-November were not available.

14 percent; and musculoskeletal disorders, gastrointestinal problems, and ear disorders each accounted for 8 percent of the complaints. Together, these six categories accounted for three-quarters of all visits. It should be noted that the acute injury category was added to the taxonomy for the last four months of the school term; in fact, many more injuries were encountered than are reflected in this table. In the Bronx-Lebanon Consortium project, for example, where presenting complaints were categorized by ICD-9 code, the first and third most common reasons for visits were lacerations and minor trauma, respectively.

Table 4.9 further illustrates the general types of common complaints of children who visited the health office for reasons other than comprehensive physicals, mass screening, and follow-up visits. The source of these data was the school site utilization sample study. This listing is more specific in regard to the most common presenting complaints of school-children but is not as comprehensive as the other taxonomy. Given the great disparity between this table and Table 4.8 in the reported frequencies of acute injury vis-a-vis skin conditions and eye disorders (the latter category is not even listed in Table 4.9), we can infer that many of the problems identified as skin or eye disorders on Health Services Reports were in fact injuries. It should be noted that headaches and stomachaches account for approximately one-fifth of the visits.

TABLE 4.9
Distribution of Presenting Complaints for
the Sample Population
September 1982 - March 1983

<u>Complaints</u>	<u>Number</u>	<u>Percent</u>
Trauma (acute injury)	770	44%
Stomachache	245	14%
Skin rash	235	13%
Headache	125	7%
Ear complaints	115	6%
Upper respiratory problems	101	6%
Immunizations	75	4%
Dental problems	50	3%
Laboratory tests	38	2%
Behavioral/emotional problems	5	<1%
Other	1	<1%
Total	1,761	100%

Source: Sample survey.

As has been noted in other school health literature, some health problems of children are cyclical. When reading through the logs, one cannot help being struck by the onslaughts of winter viruses, with most log entries for days at a time recounting episodic nausea, vomiting, and fevers. The periodic outbreak of pediculosis was also noticeable, and one school team reported a number of bee stings in the early weeks of the school term.

The disposition of visits provides another indication that children's complaints are relatively minor and/or comfortably handled by the school health team, in some instances preventing the child's being sent home. As shown in Table 4.10, 90 percent of the children are seen by the team and then sent back to class, 6 percent are sent home, and 1 percent are immediately directed to another provider.

TABLE 4.10
Disposition of Visits of Sample Children
September 1982 - March 1983

<u>Disposition</u>	<u>Number</u>	<u>Percent</u>
Rest	87	3%
Return to class	2,420	90%
Sent home	158	6%
Sent to other provider	26	1%
Other	9	0%
Total	2,700	100%

Source: Sample survey.

Note: Children sent to other providers represent only a small portion of referrals. At the end of a visit a child may be sent back to class with a referral note advising parents to seek the care of an off-site provider (e.g., for dental or vision care).

Referrals

Referrals are made by the SHDP teams either because the team does not have parental consent to diagnose or treat or because the type of evaluation or treatment required calls for greater expertise. As defined in this demonstration, referrals can be made to specific providers by the SHDP staff, or they may simply entail notifying the parents that the child's condition should be evaluated or treated by a non-SHDP health professional. As reported in the SHDP summary reports, a total of 5,085 referrals were made during the school term. Thus 6 percent of the reported encounters resulted in referrals. The findings shown in Table 4.11 indicate that projects differ somewhat in terms of the proportion of visits that turn into referrals to outside providers, with the range of referrals comprising 3-11 percent of all encounters.

TABLE 4.11
Distribution of Referrals by Project
September 1982 - June 1983

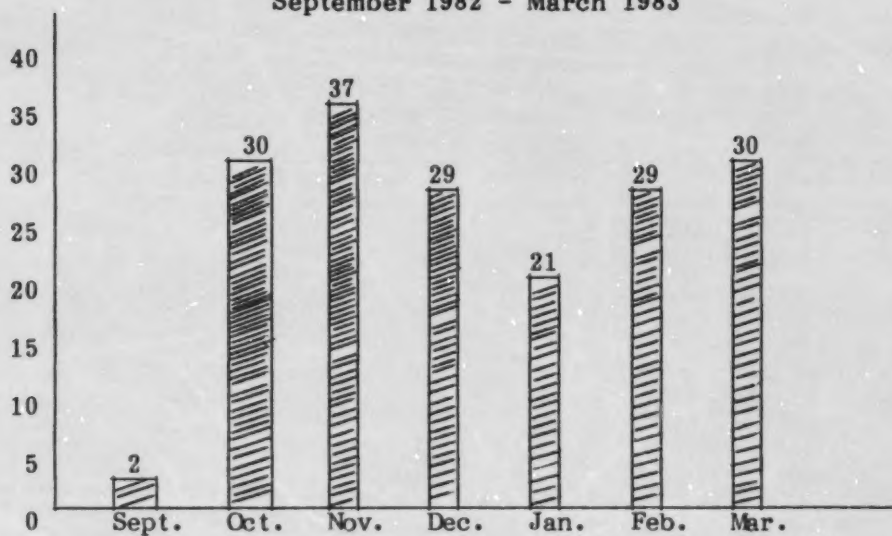
<u>Project</u>	<u>Number of Referrals</u>	<u>Percentage of Total Encounters that Led to Referrals</u>
Bronx-Lebanon Consortium	442	3%
East Harlem Council	378	4%
Harlem Hospital	1,018	7%
Hunts Point Multi-Service Center	242	5%
Jamaica Hospital	826	9%
Lutheran Medical Center	1,124	8%
Lyndon B. Johnson Health Center	514	7%
Anthony L. Jordan Health Center	184	11%
Geneva B. Scruggs Health Center	357	4%
Total	5,085	(Average) 6%

Source: Health Services Reports.

The analysis of referrals that follows derives from the sample survey that was conducted in nine schools from four projects during September 82 - March 83. There were 2,903 encounters and 178 referrals, resulting in a referral rate of 6 percent. Of the total of 156 children referred, 137 were referred once, 16 children were referred twice, and 3 of the children were referred on each of three visits.

With the exception of September, when few referrals were made, the number of referrals per month was fairly consistent (see Figure 4.9).

Figure 4.9
Number of Referrals by Month
September 1982 - March 1983



Source: Sample survey.

With the exception of third-graders, whose visits were somewhat more likely to lead to referrals, there was little difference in the grade level of children whose visits resulted in referrals and that of children not referred.

The most common reasons for referral were eye disorders, respiratory problems, acute injuries, and musculoskeletal disorders (which may include injuries). The reported reasons for referral were as shown in Table 4.12.

TABLE 4.12
Reasons for Referral to Off-Site Health Center Care Providers*

<u>Reasons</u>	<u>Number</u>	<u>Percent</u>
Dental	37	24%
Eye disorders	34	24%
Acute injury	14	9%
Musculoskeletal disorders	12	8%
Ear disorders	10	6%
Respiratory	9	6%
General symptoms, signs, and ill-defined conditions	10	6%
Nose and throat	7	5%
Genitourinary	5	3%
Gastrointestinal	3	2%
Neurological	3	2%
Allergies	2	1%
Immunization	2	1%
Blood disorders	1	1%
Other	3	2%
Total	152	100%

Source: Sample survey.

* Unknown reasons for referral = 26.

At the time of referral, the SHDP team attempts to identify the type of health professional or facility that will be treating the referred child. For some referrals the SHDP initiates the contact directly with the provider, while for others the team makes a specific recommendation to parents. In some cases the SHDP team merely identifies the type of provider that would be appropriate. The findings presented in Table 4.13 indicate that children were referred to private doctors and dentists in 26 percent of the referrals and to hospitals or health centers in 55 percent. For 7 percent of the referrals it was not known where parents planned to take their children. Fourteen out of 121 referrals (11%) were to emergency rooms. Referrals to nongrant health clinics or hospitals were slightly more common than referrals to the grantee's own health facility.

TABLE 4.13
Type of Provider to Whom
Students Were Referred*

<u>Type of Provider</u>	<u>Number</u>	<u>Percent</u>
Private doctor or dentist	32	28%
Referral to parent; provider unknown	8	7%
Hospital, hospital ambulatory clinic, or health center:		
- nongranttee	29	26%
- grantee	30	26%
Emergency room:		
- nongranttee	11	10%
- grantee	3	3%
Total	<u>113</u>	<u>100%</u>

Source: Sample survey.

*Type of provider not reported for 65 referrals.

It appears that mid-level practitioners, who handle the vast majority of school health contacts, make most of the referrals to outside providers. Physician's assistants are more likely to make referrals than are nurse practitioners. The physician's assistants (PAs) handled 49 percent of the visits that resulted in referrals, but only 21 percent of the visits that did not. Nurse practitioners (NPs) were the care providers in only 27 percent of the visits that were referred and 55 percent of other visits.

The potential for positive collaboration between providers in the community and the SHDP team is illustrated by the following vignette:

Lucy, aged 9, was found at the time of her physical exam to have an orthopedic problem. The child was referred for an orthopedic evaluation. The specialist recommended a series of exercises, which Lucy is now doing regularly with the school nurse.

Consistent with the findings reported here and elsewhere in the literature that girls tend to use medical services somewhat more than boys, 54 percent of the referrals to outside providers were for girls and 46 percent for boys.

The referral mechanism for the SHDP is particularly important for those children who either are not enrolled in the SHDP or else are enrolled in Level 2. The data presented in Table 4.14 indicate that referrals were slightly more frequent for visits by such children. Children who were not enrolled in the SHDP or who were Level 1 enrollees accounted for 35 percent of the visits that led to referrals, but only 29 percent of the visits that did not lead to referrals.

TABLE 4.14
Rate of Referral by Children's Enrollment Status^a

<u>SHDP Enrollment Status</u>	<u>Visits That Led to Referral</u>		<u>Other Visits</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Unenrolled ^b	52	29%	560	21%
Level 1	11	67%	208	8%
Level 2	15	8%	298	11%
Level 3	99	56%	1,631	60%
Total	178	99%	2,697	100%

Source: Sample Survey

a. No data on enrollment status of children for 1 visit

b. No consent form returned.

Children's Medicaid coverage appears to be unrelated to referrals. A comparison of the Medicaid coverage of children for each visit that resulted in referral to off-site providers and visits that did not indicate that there was little difference (see Table 4.15).

TABLE 4.15
Rate of Referral by
Children's Medicaid Status^a

<u>Medicaid Status</u>	<u>Visits That Led to Referral</u>		<u>Other Visits</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Covered by Medicaid	75	60%	1,327	63%
Not covered	51	40%	809	38%
Total	126	100%	2,136	101% ^b

Source: Sample Survey.

a. No data on Medicaid status of children for 52 visits.

b. Rounding error.

Impact on Disease Prevention and Health Promotion

The SHDP's accomplishments in the areas of disease prevention and health promotion consisted of providing 2,119 immunizations and conducting a broad array of health education initiatives in the school and community.

Health promotion and disease prevention, considered to be among the major objectives of the school health demonstration, became a secondary priority in some projects during the 1982-83 school term as attention was necessarily focused on implementation, enrollment, primary care, and screening. In a number of projects, however, staff developed creative and exciting programs, often in conjunction with voluntary agencies in the community. The projects that were most active in disease prevention and health promotion activities were the Bronx-Lebanon Consortium, the East Harlem Council, Harlem Hospital, Jamaica Hospital, Lutheran Medical Center, and the Anthony L. Jordan Health Center. For its part, the Bureau of Maternal and Child Health, reaffirming its commitment to prevention and recognizing that projects lacked the level of resources necessary to develop an effective program, applied for and received a grant from the Department of Health and

Human Services to help projects develop more comprehensive and stable health promotion and disease prevention components. Needs assessment and planning commenced during the summer of 1983.

All of the projects routinely teach about health and illness in the course of individual encounters. And just as a medical condition provides an opportunity to teach positive health attitudes and behaviors to specific children, an incident may stimulate classroom discussions. In one school, the sudden and unexpected death of a teacher was used by the SHDP staff to open discussions among the class that explored their thoughts about death and dying.

The core health team, and in some projects health educators, developed programs in response to needs that they recognized in the course of their work. In some cases teachers or principals alerted the team to needs. The types of programs and activities conducted included health education, resource identification, newsletters, health fairs and other community outreach, and career days.

Health Education

The SHDP team imparted information about health and illness to groups of children, parents, and teachers. In the Bronx-Lebanon project, peer counseling was selected as a very effective method of instruction. The following description was published in the Annual Report: July 1982 to June 1983, prepared by the Primary Care Development Unit of the Community Service Society of New York:

Since the CSD 9 project began in the Fall of 1982, attention has been focused on the development of health education programs which would challenge, involve and influence the lifetime habits of children and families. Finding that children themselves are often the best and most enthusiastic teachers, this objective has been realized through the creation of the HEALTH ANGELS, a student health corps in which children learn about dental hygiene; prevention of heart and other diseases; and good health habits, such as the need for physical exercise and good nutrition.

The HEALTH ANGELS peer education program was initiated in Community Elementary School 55 with an inaugural ceremony which included the participation of Mrs. Mario Cuomo and Dr. David Axelrod, New York State Commissioner of Health. A group of nine fifth graders in the school were awarded certificates of achievement after having completed training in dental hygiene for positions as certified "tooth tutors." The HEALTH ANGELS will expand in Community Elementary School 55 to include twenty fourth and fifth graders in the Fall of 1983 and will be replicated as well in the remaining Consortium schools in the Spring of 1984. (pp. 7-8)

Bronx-Lebanon also sponsored poster and essay contests to reinforce positive attitudes and knowledge. "Rap" sessions and informal group discussions were used in some of the Jamaica Hospital programs, for parents as well as for children.

The East Harlem Council project's health education initiatives showed considerable planning and demonstrated the potential for coordination between the health and education systems. Subsequent to meetings of principals, assistant principals, other school staff, and staff of the SHDP and Chancellor's projects, for example, SHDP staff and the nurse practitioner from the Chancellor's Project developed a six-session curriculum entitled "Family Living Including Sex Education," which was offered to ninth-graders (with parental consent). According to respondents, the pro-

gram was received enthusiastically. The project also provided sex education for sixth-graders and a program of nutrition education and weight control for obese junior high school children. Other health education topics covered in East Harlem Council project schools were choking, the heart and circulatory system, and good grooming. East Harlem staff conducted outreach to parents and teachers through letters and newsletters containing information on lice, otitis media, and tuberculosis.

The following topics that projects reported having covered in selected classrooms illustrate the wide range of information that was made available to children during the year:

circulatory system	menstruation
death and dying	nutrition/weight control
dental health	poison prevention
drug and alcohol prevention	rescue/first aid for choking victims
eyes and ears	safety
family life education	self-image
family planning	sexually transmitted diseases
health awareness for adolescents	sickle cell anemia
hygiene/grooming	smoking prevention
hypertension	

Teachers and parents received instruction separate from children in the areas of nutrition, parenting, asthma, sex education, substance abuse, pediatric emergencies, drug and alcohol prevention, head lice, and tuberculosis.

Resource Identification

The project staff looked to state and voluntary agencies for existing curriculum materials, media resources, posters, and other instructional materials. In some cases classes were conducted by, or with assistance from, voluntary agencies. The Anthony L. Jordan project, taking advantage of the well-organized health network in Monroe County, created

linkages with the Red Cross, the United Cancer Council, the American Cancer Society, the American Lung Association, Planned Parenthood, Lifeline (the poison control center), the Health Science Department of SUNY at Brockport, and the Monroe County Department of Youth Services. With the help of these groups, the SHDP staff created a resource library for materials on family life, human development, chemical dependence, and mental health.

Sources of materials mentioned by other projects included the Dairy Council of Metropolitan New York, Inc., the Department of Health, Sloan-Kettering Hospital, Planned Parenthood, and the Cornell University Cooperative Extension.

Newsletters

SHDP team members at the Anthony L. Jordan Health Center project created a newsletter called Your Buddy, Your Body for elementary-level students. In addition, they provided teachers with a brief newsletter to inform them about children's health. The first two issues focused on ringworm and impetigo. Similarly, teachers at one of the East Harlem Council projects were sent a newsletter that covered the causes and effects of otitis. Parents were informed about lice in a letter developed by SHDP staff.

Health Fairs and Other Community Outreach

Health fairs, held either in the school or in the community, were popular forms of outreach at the Bronx-Lebanon Consortium, Harlem Hospital, Hunts Point, Jamaica Hospital, and Lutheran projects. Staff from the Jamaica Hospital project provided expertise in the area of substance abuse at a neighborhood panel sponsored by the public library.

Career Days

The Harlem Hospital and the Anthony L. Jordan projects participated in career days to inform children about the job duties of various health professions and the type of training required for those positions. Since SHDP staff represent positive role models (according to the teacher and principal surveys), their participation in career days should be especially valuable in stimulating children's interest in health-related careers and, at the same time, providing encouragement and direction.

5 TEACHERS' AND PRINCIPALS' SATISFACTION

The success of the school health model is in large part dependent upon its ability to become integrated into the school setting. Whereas most school health models operate primarily under a single entity--the school district--in this model the school district and health facility operate conjointly. The SHDP team is directly accountable to the health facility, but because the team is physically located in the school building, it operates within the school's calendar and daily schedule. To facilitate a successful program, the roles and responsibilities of the school and the health facility should be clearly identified before implementation. Moreover, a committed attitude by staff from both agencies appears to go a long way toward helping the program through implementation.

The following are some of the ways in which schools have assisted the project administratively to meet children's health needs:

- Provided access to parents through parent-teacher associations and dissemination of consent forms through the classroom
- Provided an orientation to teachers
- Developed a system in which optional enrollment in the SHDP is part of the school enrollment process
- Agreed to a health visit schedule, with regular walk-in hours and certain hours for appointments only
- Developed protocols for handling special problems such as suspected child abuse and neglect, and emergencies

As part of the evaluation, WRI conducted a survey of principals and teachers at the participating schools. The surveys were designed to determine whether teachers and principals were satisfied with the program

and staff and to obtain opinions about the program's impact on children. Findings about satisfaction are important in a program evaluation, not only for providing feedback but also for aiding the interpretation of findings about the program's operation. For example, if there were low rates of enrollment, one would want to determine whether the rates indicated problems in gaining access to parents or reflected parents' lack of interest in the program.

Between the months of April and June, 1983, a survey questionnaire was distributed to each of the 54 school principals and day care/Head Start directors participating in the demonstration. (Two Head Start centers were administered by one director.) A total of 34 questionnaires were returned, a response rate of 63 percent. During the same period a teacher survey was distributed, with the help of the principals, to fulltime classroom teachers in a representative sample of ten schools and one day care center. The teacher's survey instrument contained a subset of the questions on the principal's questionnaire. Approximately 139 teachers, 42 percent, responded to the survey questionnaire.*

Extent of Contact

One of the first survey questions concerned the extent to which school personnel interact with the SHDP staff, with the reported frequency of meetings indicating the level of cooperation between the two groups.

Program planning, implementation, and operations required a high degree of interaction between principals/directors and SHDP staff. Contact at least once a week was the norm for 85 percent of the respondents. Prin-

* The findings of these surveys, including a more comprehensive description of the sample, have been published in Findings of the SHDP Teachers Survey, July 1983, and Findings of the SHDP Principals Survey, September 1983.

cipals/directors reported that the overwhelming majority of their contacts with the project concerned the needs of specific students. Teachers reported less contact with the SHDP, with fewer than a third of the teachers having regular (at least once a week) contact with the staff. One quarter reported periodic contact (i.e., at least monthly), while 43 percent had less frequent contact. Like those of the principals, most of the teachers' contacts concerned the health status of particular students.

Satisfaction with the SHDP

The principal and teacher respondents were enthusiastic about the demonstration project. The principals valued the SHDP as a resource that could respond quickly to accidents and minor complaints. They also supported the provision of preventive services at the school site. According to the principals' reports, school health services immediately prior to the demonstration had been very limited, and the project represented a vast improvement. Some of the principals reported that the benefits of the program went beyond the delivery of health services. One principal reported that the entire school environment had been positively affected. Another underscored the value of the SHDP staff in serving as role models for the children.

Teachers reported a great deal of satisfaction with the project as well. Their reasons included the quality of the service, SHDP staff sensitivity to students, and the transfer of responsibility for sick and injured children, freeing teachers for classroom instruction. Furthermore, teachers appreciated the assistance of the SHDP team members in health education projects.

Table 5.1 shows that, over all, principals and teachers reported a high level of satisfaction with the program.

TABLE 5.1
Level of Satisfaction with the SHDP

	<u>Principals</u>	<u>Teachers</u>
Very much satisfied	88%	74%
Slightly satisfied	6%	10%
Slightly unsatisfied	3%	2%
Very much unsatisfied	0%	1%
Don't know/no answer	3%	12%
	<u>100%</u>	<u>99%*</u>

* Rounding error.

The respondents were asked to rate each of eight separate aspects of the health services and three aspects of SHDP staff, using a four-point scale--excellent, good, fair, poor. As shown in Tables 5.2 and 5.3, all aspects received highly positive ratings.

Priority Activities for the School Health Program

Teachers and principals were asked to rank a list of activities that a school health program might conduct, in order to indicate their perceptions of the appropriate role of the school health service. We were particularly interested in knowing the relative ratings assigned to mandated school health services (vision, hearing, height and weight screening, and physical exams for new entrants) as compared to primary and other preventive services.

Table 5.4 shows the order of responses and average rating. (Principals wrote in two activities in addition to those on the survey.) Teachers and principals appear to favor a mix of preventive and primary care services, assigning a relatively low priority to health education, working with

TABLE 5.2

Health Services and Staff Ratings by Principals

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Do Not Know</u>	<u>No Answer</u>	<u>Total Percent</u>
<u>Health Services</u>							
Availability of services	68%	32%	0%	0%	0%	0%	100%
Quality of services	82%	18%	0%	0%	0%	0%	100%
Efficiency of services	74%	26%	0%	0%	0%	0%	100%
Efficiency of follow-up	62%	26%	6%	0%	0%	0%	100%
Comprehensiveness of services	62%	32%	3%	0%	3%	0%	100%
Responsiveness of services	76%	18%	3%	0%	3%	0%	100%
Flexibility of services	70%	24%	3%	0%	3%	0%	100%
Continuity of services	67%	25%	3%	0%	6%	0%	100%
<u>Health Staff</u>							
Availability of staff	85%	12%	3%	0%	0%	0%	100%
Cooperativeness of staff	88%	9%	3%	0%	0%	0%	100%
Quality of staff	82%	15%	3%	0%	0%	0%	100%

TABLE 5.3

Health Services and Staff Ratings by Teachers

	<u>Excellent</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	<u>Do Not Know</u>	<u>No Answer</u>	<u>Total Percent</u>
<u>Health Services</u>							
Availability of services	47%	35%	7%	1%	6%	4%	100%
Quality of services	52%	30%	3%	0%	11%	4%	100%
Efficiency of services	47%	29%	9%	0%	11%	4%	100%
Efficiency of follow-up	45%	29%	8%	1%	14%	3%	100%
Comprehensiveness of services	39%	27%	6%	1%	21%	6%	100%
Responsiveness of services	49%	28%	6%	1%	12%	4%	100%
Flexibility of services	39%	27%	10%	0%	19%	5%	100%
Continuity of services	40%	24%	9%	1%	20%	6%	100%
<u>Health Staff</u>							
Availability of staff	55%	22%	9%	1%	8%	5%	100%
Cooperativeness of staff	65%	19%	4%	0%	8%	4%	100%
Quality of staff	61%	20%	2%	0%	12%	4%	99%

TABLE 5.4

Priority Activities for the School Health Program

Activity	Principals		Teachers	
	Rank	Average Rating	Rank	Average Rating
Conducting comprehensive physical exams	1	3.4	5	8.7
Responding to acute injuries/illnesses	2	5.5	1	6.0
Providing immunizations	3	5.9	6	9.5
Vision screening	4	8.8	3	7.8
Hearing screening	5	9.7	4	8.0
Responding to minor complaints	6	9.8	11	12.4
Identifying cases of child abuse	7	9.9	2	6.9
Following up on referrals to community providers	8	10.3	15	13.5
Managing chronic diseases	9	11.7	17	13.6
Identifying/assessing children with developmental delays	10	12.0	13	12.9
Helping children to access needed health and dental services in the community	11	12.3	10	12.0
Dental screening	12	12.4	7	9.7
Working with dysfunctional families	13	12.8	18	13.9
Height and weight screening	14	13.6	14	13.5
Providing "ILC"	15	13.7	21	15.4
Screening for lice	16	13.9	8	10.8
Responding to psychological problems	17	14.0	9	11.1
Working to improve safety in the school environment	18	14.4	20	15.2
Identifying/assessing children with learning disabilities	19	14.9	13	12.9
Helping children cope with physical handicaps	20	15.3	19	14.0
Providing special kinds of health information	21	15.5	-	-
Consulting with staff about health information and education	22	16.3	-	-
Teaching health education	23	19.2	12	12.4

children who are handicapped, or improving school safety. The respondents valued highly the ability of the SHDP team to respond to accidents. In fact, this concept surfaced repeatedly in response to a number of survey questions. Preventive services, including screening and physical examinations, were also ranked high. It is interesting to note that response to minor complaints, screening for lice, and height and weight screening--which represented a relatively large number of the student contacts and staff time--were ranked in the middle. It should be noted as well that the school principals and teachers perceived that the SHDP staff could play a significant role in identifying child abuse and neglect.

Impact on Learning

The majority of principals and teachers expressed the opinion that the SHDP had had a positive effect on learning (see Table 5.5). The explanation provided most frequently was that healthy children are better able to learn. Principals also responded that corrected hearing and vision deficits can significantly improve a child's academic performance. Both teachers and principals noted that children also benefit academically if they don't have to miss school because of suspected illness or well-child care. Moreover, both groups reported that the SHDP had helped children learn about health-related topics.

TABLE 5.5
Impact of the SHDP on Learning

	<u>Principals</u>	<u>Teachers</u>
Positive effect	85%	59%
Negative effect	0%	0%
No effect	3%	26%
Don't know/No answer	<u>12%</u>	<u>14%</u>
Total	100%	99%*

*Rounding error.

Impact on Attendance

As shown in Table 5.6, approximately two-fifths of the responding principals and one-fifth of the teachers thought that the SHDP had improved attendance. A larger number felt that they couldn't really assess whether changes in attendance (if any) could be attributed entirely to the program. However, a number of teachers and principals could identify specific instances in which children had been able to avoid absences because health services were available on site; for example, children were able to receive immunizations at school, receive treatment for an asthma attack and return to class, or be seen by a practitioner early in the morning to determine whether an incipient complaint warranted sending the child home from school. Absence, of course, may have many causes, and the extent to which the SHDP contributed to a reduction of absences does not appear to be a reasonable criterion for measuring the program's success.

TABLE 5.6

Impact of the SHDP on Attendance

	<u>Principals</u>	<u>Teachers</u>
Attendance has improved	44%	19%
Attendance has not improved	15%	12%
Don't know/no answer	<u>41%</u>	<u>68%</u>
Total	100%	99%*

* Rounding error.

6 DISCUSSION

On the basis of evaluation findings, the School Health Demonstration Program appears to be an effective approach to the delivery of health care services to children in low-income communities in New York's three largest cities. Virtually all parties involved in the program, including the administrative staff of the Bureau of Maternal and Child Health, program directors and administrators, SHDP team members, principals, teachers, and parents (by virtue of enrollment levels), express a great deal of satisfaction with the program and optimism for what it can yet accomplish.

The program was initially funded in the fall of 1981. But because of the complexity of the demonstration, SHDP direct service staff did not enter the schools until April 1982. At that point their program activities were primarily administrative, including record review, needs assessment, and student enrollment, with only limited direct services provided.

This evaluation focuses on the first full school year of services, September 1982-June 1983. The evaluation research was designed to provide very basic information about the program's features, the services provided, and the program's integration into the schools. Such information was viewed as fundamental for responding to the numerous and wide-ranging questions that have been posed by policymakers and others about the SHDP's effectiveness and replication potential, as well as its ability to address epidemiological concerns. Certain program aspects, such as cost savings and impact on utilization of other services, of course, cannot be evaluated until the program has been operating for more than a year. Consequently, cost and

utilization issues will be a special concern of next year's evaluation effort.

The following observations derive from the interviews, surveys, report analyses, and research studies conducted for this evaluation.

Implementation

The SHDP was successfully implemented in nine projects in low-income communities in Buffalo, Rochester, and New York City. Fifty-five public and private schools and Head Start and day care centers were served by teams that included, at a minimum, a core team consisting of a nurse practitioner or physician's assistant, health aide, and physician. The schools were primarily elementary-level but spanned the range from preschool to high school. The day care program served children as young as two months.

Enrollment

A total of 22,689 children were formally enrolled in the SHDP by their parents. This figure represents 63 percent of the total number of children attending the participating schools. (Close to 36,000 children attend the participating schools at a single point in time, but because of high rates of turnover in these schools, many more children flow through the school during the term.) All children in the participating schools were eligible for the usual health services regardless of their formal enrollment status.

Most parents who enrolled their children in the SHDP chose either of the two level-of-care options that covered more than the usual health services available at the school. Out of the entire school population, 53

percent of the children were enrolled for comprehensive physicals or complete care, and of the SHDP enrollees, 83 percent chose these options for expanded services.

The SHDP appears to be equally attractive to medically indigent families and those covered by Medicaid. Families with no public insurance were no more likely to register their children for complete care (Level 3) than were those with Medicaid. Approximately half of the children enrolled for more than the usual school health services (Levels 2 and 3) were reported by parents to be covered by Medicaid.

Although we were not able to obtain reliable data on the previous source of regular primary care for all enrolled students, on the basis of reports by parents and the impressions of project administrators, it appears that the SHDP provided children with improved access to care. A third of the parents of children enrolled in Levels 2 and 3 did not report a regular source of primary care for their children; when this information was reported, the selection of provider appeared to be a function of the nature of the problem and the availability of providers. Similarly, in regard to school-based services, reports from principals and the New York City Health Department indicate that prior to the SHDP, children, for the most part, had limited access to screening, referral, and follow-up at school.

Program Model

The SHDP has a medical orientation; however, it is far more than a satellite clinic located in a school, primarily because the program focuses heavily on preventive care in addition to primary care. To a great degree, the strength of the program seems to derive from its willingness to assume

the traditional school health functions as well as to offer primary health care services. In addition, SHDP staff appear to be satisfied with the latitude they have been given to address the social/health needs of children--needs that might not come to the attention of a health center or emergency room but that could adversely affect a child's school attendance and academic performance, such as child abuse or neglect, family dysfunction, or school adjustment problems.

There are differences among the projects in overall performance that seem to be a function of health center or community health care resources available to the project, and of the characteristics of the project staff and their commitment to the success of the project.

Presenting Complaints

Children and teachers initiated 70 percent of all contacts with SHDP staff. Trauma was the most common reason for these visits and, together with stomachache and skin problems (including lice), accounted for almost 60 percent of the visits. Injuries and accidents, sometimes serious but mostly minor, accounted for a large share of the visits.

Services

The SHDP had 83,602 encounters with children during the school term. Services (sometimes multiple) rendered during these encounters included:

- 7,212 comprehensive physical exams
- 22,373 primary care services
- 9,121 follow-up visits
- 2,119 immunizations
- 15,055 first aid and responses to minor complaints
- 38,514 screenings

In addition, SHDP staff had numerous contacts with parents, teachers, principals, and others to discuss particular children. Although such contacts are time-consuming and nonreimbursable, in some cases they are as important to the child's well-being as direct medical treatment.

The first year of the program's operation has made clear that it is easy for programs to become overwhelmed by children's minor complaints unless special hours are scheduled for "sick call," as well as for physicals and screenings. The first year's operation has also indicated that as administrators gain more experience with the demand for services, they will probably need to make decisions about the types of care that are most appropriately provided by the mid-level practitioner as opposed to the health aide. Likewise, the school staff and health team should identify the types of problems that should be referred to the SHDP and those that can be effectively handled in the classroom.

Referrals were made by the SHDP teams either because they did not have parental consent to diagnose or treat the child or because an SHDP-enrolled child required more complicated diagnosis or treatment than could be rendered on site. Over all, the project reported that 6 percent of all encounters led to referrals. The most common reasons for referral were eye disorders (and vision problems), respiratory problems, and acute injuries. Children who were not enrolled in Level 2 or 3 were slightly more likely to be referred by SHDP staff to off-site providers.

Staffing

The use of nurse practitioners and physician's assistants in the school setting, with physician backup and health aide assistance, appears to

be suitable for programs in these low-income, urban schools. Mid-level practitioners provide most of the direct care, and it appears that most of the types of problems encountered can be handled routinely by the mid-level practitioner and health aide, with physicians on call for consultation and examination if needed. Indeed, one of the strengths of the program appears to be its team approach, which combines the credibility and expertise of a health care professional with the health aide's grounded understanding of families in the community. Principals appeared also to trust the knowledge and abilities of the mid-level practitioner, which in turn, no doubt, increased the effectiveness of the program. Parental responsiveness to the mid-level practitioner was demonstrated, according to project reports, by those many parents who, upon contact with the mid-level practitioner about a specific health concern, chose to change their children's enrollment status from Level 1 or 2 to Level 3.

Medicaid Reimbursement

Medicaid can be expected to be one source of support for this model, but certain limitations should be noted. First, obtaining accurate, up-to-date Medicaid numbers requires considerable clerical support, and billing depends heavily on backup from the health facility business office. Second, only half of the students are covered by Medicaid, and only a small proportion of their encounters are reimbursable. Other means of financing the program will need to be identified once the demonstration period has ended.

Program Administration

The experience of the SHDP's first year demonstrates that it is possible to have a school-based health program that is administered outside

of the school. This finding is relevant to one aspect of the current debate concerning whether the Health or Education Department should have primary responsibility for school health. It may be that a collaborative model is not only feasible but preferable. Among the more evident advantages of such collaboration is the fact that the linkage to a health facility ensures continuity of care beyond school hours and vacations, while the school provides the health program with access to a captive population of children, thereby facilitating case finding, treatment, and follow-up. Moreover, a collaborative model seems to promote an illness prevention/health promotion emphasis that goes beyond the scope of services available to children who typically receive fragmented, episodic care.

APPENDIX A
SCHOOL HEALTH SERVICES
DEMONSTRATION PROJECT GRANTEES

**THE NYS SCHOOL HEALTH SERVICES
DEMONSTRATION PROJECT GRANTEES**

Bronx Lebanon Consortium
Montefiore-Morrisania CHCC
230 East 162nd Street
Bronx, NY 10451

(212) 992-9265

Stanley Harris, M.D., Project Director
Connie Garcia, Program Administrator

East Harlem Council for Human Services
2253 Third Avenue
New York, NY 10035

(212) 722-7117

Vidal Perez, Project Director
Donald Velazquez, Program Administrator

Harlem Hospital
506 Lenox Avenue
New York, NY 10037

(212) 491-1611

Margaret C. Heagarty, M.D., Project Director
Wendell Edgecomb, Program Administrator

Hunts Point Multi-Service Center Corporation
661 Caldwell Avenue
Bronx, NY 10455

(212) 993-3800

Luis Fuentes, Project Director
Jaime S. Huertas, Program Administrator

Jamaica Hospital
89th Avenue and Van Wyck Expressway
Jamaica, NY 11418

(212) 657-1800

Beatrice Kresky, M.D., Project Director
Kathleen Weber, Program Administrator

Lutheran Medical Center
150 55th Street
Brooklyn, NY 11220

(212) 630-7212

Jim Stiles, Project Director
Monica Burns, Program Administrator

Lyndon Baines Johnson Health Complex, Inc.
276 Nostrand Avenue
Brooklyn, NY 11205

(212) 636-2220

Denis Jardine, Project Director
Hazon Mohammed, Program Administrator

Anthony L. Jordan Health Center
82 Holland Street
P.O. Box 867
Rochester, NY 14603

(716) 423-5820

Timothy Downs, Project Director
John Goode, M.D., Program Administrator

Geneva B. Scruggs Community Health Center
567 Kensington Avenue
Buffalo, NY 14214

(716) 894-3556

Lillian Davis, Project Director
Program Administrator (Vacant)

APPENDIX B
SCHOOLS PARTICIPATING IN THE SHDP

<u>PROJECT</u>	<u>SCHOOL</u>	<u>ADDRESS</u>	<u>GRADE LEVELS</u>	<u>TOTAL SCHOOL ENROLLMENT</u>
Bronx-Lebanon Consortium District 9	55	450 St. Paul's Place Bronx, NY 10456	K-6	650
	64	1425 Walton Avenue Bronx, NY 10452	K-6	1,280
	73	1020 Anderson Avenue Bronx, NY 10452	K-5	700
	90	George Meany School 1116 Sheridan Avenue Bronx, NY 10456	K-5	1,533
	229	275 Harlem River Park Bridge Bronx, NY 10453	K-4	<u>567</u>
				4,730
East Harlem Council (Boriken NHC) District 4	112	555 E. 119th Street New York, NY 10035	K-6	532
	45	2351 First Avenue New York, NY 10035	6-8 (JHS)	1,100
	96	216 E. 120th Street New York, NY 10035	K-6	600
	155	319 E. 117th Street New York, NY 10035	K-6	630
	7	160 E. 120th Street New York, NY 10035	K-6	680
St. Paul's		114 E. 118th Street New York, NY 10035	K-8	<u>230</u>
				3,772

<u>PROJECT</u>	<u>SCHOOL</u>	<u>ADDRESS</u>	<u>GRADE LEVELS</u>	<u>TOTAL SCHOOL ENROLLMENT</u>
Harlem Hospital District 5	136	Six Edgecombe Avenue New York, NY 10030	6-8(JHS)	732
	197	2230 Fifth Avenue New York, NY 10037	K-6	655
	194	242 W. 144th Street New York, NY 10030	K-6	593
	30/31	144 E. 128th Street New York, NY 10035	K-7	464
	200	2589 Seventh Avenue New York, NY 10039	K-5	644
	10	2581 Seventh Avenue New York, NY 10039	6-8 (JHS)	561
	St. Charles	214 W. 142nd Street New York, NY 10030	1-8	510
				4,159
Hunts Point Multi- Service Center District 7	161	628 Tinton Avenue Bronx, NY 10455	K-6	520
	157	757 Cauldwell Avenue Bronx, NY 10456	K-6	583
	155	470 Jackson Avenue Bronx, NY 10455	6-8 (JHS)	711
	St. Peter/Paul	838 Brook Avenue Bronx, NY 10451	K-8	430
	St. Anselm's	685 Tinton Avenue Bronx, NY 10455	K-8	575
				2,819

<u>PROJECT</u>	<u>SCHOOL</u>	<u>ADDRESS</u>	<u>GRADE LEVELS</u>	<u>TOTAL SCHOOL ENROLLMENT</u>	
Jamaica Hospital District 27	155	130-02 115th Avenue So. Ozone Park, NY 11420	K-6	550	
	223	125-20 Sutphin Blvd. Jamaica, NY 11436	Pre-K-6	804	
	45	126-28 150th Street Ozone Park, NY 11436	K-6	405	
	123	145-01 119th Avenue So. Ozone Park, NY 11436	K-6	600	
	96	130-01 Rockaway Blvd. So. Ozone Park, NY 11420	K-6	335	
	St. Theresa of Avila	109-55 128th Street So. Ozone Park, NY 11420	K-8	314	
	<u>So. Jamaica Center for Children & Parents</u>				
	Headstart I	157-11 Linden Blvd. Jamaica, NY 11420	Pre-school	135	
	Headstart II	89-30 161st Street Jamaica, NY 11420	Pre-school	<u>120</u>	
Lutheran Medical Center District 15	1	309 47th Street Brooklyn, NY 11220	K-6	1,146	3,263
	94	5010 Sixth Avenue Brooklyn, NY 11220	K-6	1,392	
	172	825 Fourth Avenue Brooklyn, NY 11220	K-6	667	
	St. Michael's I	4222 Fourth Avenue Brooklyn, NY 11220	K-8	331	
	314	330 59th Street Brooklyn, NY 11220	K-6	<u>8</u>	
					5,014

<u>PROJECT</u>	<u>SCHOOL</u>	<u>ADDRESS</u>	<u>GRADE LEVELS</u>	<u>TOTAL SCHOOL ENROLLMENT</u>
Lyndon Baines Johnson Health Center District 13	117	300 Willoughby Avenue Brooklyn, NY	6-8 (JHS)	850
	256	114 Kosciusko Street Brooklyn, NY 11205	K-6	859
	54	195 Sanford Street Brooklyn, NY 11205	K-6	508
	270	241 Emerson Place Brooklyn, NY 11205	K-6	597
	282	180 Sixth Avenue Brooklyn, NY	K-6	680
	Tabernacle Education Action School	264 Lexington Avenue Brooklyn, NY 11205	K-6	155
	Tabernacle Church of God Day Care Ctr.	34-52 Kosciusko Street Brooklyn, NY 11205	Pre-school	306
	St. Peter Claver	One Jefferson Avenue (15 Claver Place) Brooklyn, NY 11238	K-8	205
				4,160
Anthony L. Jordan Health Center	Ben Franklin Jr.-Sr. High	950 Norton Street Rochester, NY 14621	7-12	2,136
	5	95 Herman Street Rochester, NY 14605	K-6	556
	9	485 ^{N.} Clinton Avenue, North Rochester, NY 14605	K-6	1,093
	St. Stanislaus	1150 Hudson Street Rochester, NY 14621	K-8	276
				4,061

<u>PROJECT</u>	<u>SCHOOL</u>	<u>ADDRESS</u>	<u>GRADE LEVELS</u>	<u>TOTAL SCHOOL ENROLLMENT</u>
Geneva B. Scruggs Health Center	Martin Luther King Institute	407 High Street Buffalo, NY	Pre-K-8	958
	Academic Challenge (6)	S. Division & Hickory Streets Buffalo, NY	Pre-K-8	902
	4	425 So. Park Ave. Buffalo, NY	Pre-K-8	537
	12	33 Ash Street Buffalo, NY 14204	Pre-K-2	331
	31	212 Stanton Street Buffalo, NY 14212	Pre-K-8	320
	61	Leroy and Girder Sts. Buffalo, NY 14215	Pre-K-2	639
	St. Columba	418 No. Division Buffalo, Ni	Pre-K-2	<u>360</u>
				4,047

Summary of School Characteristics

Number of Public Schools		42
Elementary	36	
Intermediate, or Jr./Sr. High	6	
Number of Private Schools		13
Parochial Schools	10	
Head Start Programs	3	
TOTAL SCHOOLS		55

APPENDIX C
SHDP LOGS AND REPORTING FORMS

SCHOOL HEALTH SERVICES PROJECT

DAILY VISIT LOG

DATE: _____

Codes					1	2	3	4	5	6	7	8				
Name	"√" if First Visit*	Sex	Age	Grade	Enrollment Status	Presenting Complaint (condition)	Complaint	"√" if Aggressive Interaction	Person Initiating Contact	Services Provided	Staff	Primary Care Diagnosis ICD-9 Code**	Disposition	"√" if Off-site Referral	RY	Billing Status

* First visit this school year.

** ICD-9 codes for conditions identified during primary care visits or complete physical exams.

Enrollment Status - Code 1

- 1 - Level 1: usual school health services only
- 2 - Level 2: usual school health services and physical exam
- 3 - Level 3: complete care
- 0 - Not enrolled

Presenting Complaint (condition) - Code 2

- 1 - eye disorders
- 2 - ear disorders
- 3 - dental
- 4 - respiratory
- 5 - nose and throat
- 6 - infections-general
- 7 - allergic disorders
- 8 - skin
- 9 - heart and cardiovascular
- 10 - blood disorders
- 11 - gastrointestinal
- 12 - genitourinary
- 13 - musculoskeletal disorders
- 14 - nutrition
- 15 - neurological disorders
- 16 - social behavioral problems/mental disorders
- 17 - general symptoms, signs, and ill-defined conditions
- 18 - immunization/vaccination

Person Initiating Contact - Code 3

- 1 - Student
- 2 - School health project staff
- 3 - Teacher
- 4 - Other school personnel
- 5 - Parent
- 6 - Other (specify)

Services Provided - Code 4

- 1a - Episodic Care/injury
- b - Management of chronic illness
- c - Follow-up (recheck) on previously identified condition
- d - Psycho/social visit
- 2 - First aid (nonbillable)

Services Provided - Code 4 (continued)

- 3 - Immunization/vaccination
- 4 - Complete physical exam
- 5 - Counseling/education
- Mass screening:
- 6a - Vision
- b - Hearing
- c - Dental
- d - Other (specify)

Staff - Code 5

- NP - Nurse Practitioner
- PA - Physician's Assistant
- HA - Health Aide
- P - Physician
- Other (specify)

Disposition - Code 6

- 1 - Rest
- 2 - Return to class
- 3 - Sent home
- 4 - Sent to other health provider
- 5 - Other (specify)

RX - Code 7

- 1 - Presigned Rx
- 2 - Physician writes Rx at school site
- 3 - Nurse practitioner writes Rx
- 4 - Child referred to grantee facility for Rx
- 5 - Other (specify)

Billing Status - Code 8

- 1 - Nonbillable service
- 2 - Primary/Episodic Care Visit or Follow-up Visit
- 3 - Complete physical exam

SCHOOL HEALTH SERVICES--OFF-SITE REFERRAL LOG

DATE OF REFERRAL	NAME	ENROLLMENT STATUS CODE 1	GRADE/ROOM	REASON FOR OFF-SITE REFERRAL		ICD-9 CODE	TYPE OF PROVIDER CODE 3	DATES OF FOLLOW-UP ACTIVITIES						OUTCOME CODE 2	DATE PROBLEM RESOLVED
				CONDITION	CODE 2			CLIENT CONTACT	TELEPHONE CALL	TO HOME	MAIL SENT	HOME VISIT	CONTACTED HEALTH PROVIDER		

Condition-Code 2

- 1 = eye disorders
- 2 = ear disorders
- 3 = dental
- 4 = respiratory
- 5 = nose and throat
- 6 = infections-general
- 7 = allergic disorders
- 8 = skin
- 9 = heart and cardiovascular
- 10 = blood disorders
- 11 = gastrointestinal
- 12 = genitourinary
- 13 = musculoskeletal disorders
- 14 = nutrition
- 15 = neurological disorders
- 16 = social behavioral problems/mental disorders
- 17 = general symptoms, signs, and ill defined conditions
- 18 = immunization/vaccination

Enrollment Status-Code 1

- 1 = usual school health services only
- 2 = usual school health services and physical exam
- 3 = complete care
- 0 = not enrolled

Type of Provider-Code 3

- 1 = grantee hospital, grantee neighborhood health center or a subcontractor to grantee
- 2 = grantee hospital emergency room
- 3 = nongrantee hospital ambulatory clinic
- 4 = nongrantee neighborhood health center
- 5 = nongrantee hospital emergency room
- 6 = private doctor or dentist
- 7 = provider unknown
- 8 = other (specify)

Outcome of Referral-Code 4

- 1 = referral open
- 2 = referral closed (condition evaluated/treated)
- 3 = noncompliance

SUMMARY ENROLLMENT STATISTICS FOR ALL SCHOOLS (Report in Numbers)

GRANTEE: _____
 CONTACT PERSON: _____
 TELEPHONE NUMBER: _____

REPORTING PERIOD: FROM _____ TO _____
 NUMBER OF PARTICIPATING SCHOOLS: _____
 TOTAL STUDENT POPULATION: _____

Enrollment Data for this Reporting Period	LEVEL 1 Care -- Mandated screening and responding to minor complaints	LEVEL 2 Care-- Physical Examination Plus Level 1 Care	LEVEL 3 Care -- Complete Care
A. New students enrolled in school health project during this reporting period	1.A _____	2.A _____	3.A _____
B. Total project enrollment to date (total enrollment minus students leaving program)	1.B _____	2.B _____	3.B _____
C. Number of students enrolled this quarter with public or private insurance coverage at the time of enrollment in the program		2.C _____	3.C _____
C.1 number enrolled this quarter that are covered by Medicaid		2.C.1 _____	3.C.1 _____
D. Number enrolled this quarter that are not covered by any public or private insurance		2.D _____	3.D _____
E. Number of students with a regular primary care provider at time of enrollment:		2.E _____	3.E _____
Source of regular primary care at the time of enrollment:			
E.1 hospital emergency room		2.E.1 _____	3.E.1 _____
E.2 hospital clinic		2.E.2 _____	3.E.2 _____
E.3 neighborhood health center		2.E.3 _____	3.E.3 _____
E.4 other (specify): _____		2.E.4 _____	3.E.4 _____
E.5 _____		2.E.5 _____	3.E.5 _____

SCHOOL HEALTH SERVICES DEMONSTRATION PROJECT

HEALTH SERVICES REPORT

PROJECT SUMMARY: ALL SCHOOLS (Report in Numbers)

GRANTEE: _____
 CONTACT PERSON: _____
 TELEPHONE NUMBER: _____

REPORTING PERIOD: FROM _____ TO _____
 NUMBER OF PARTICIPATING SCHOOLS: _____
 TOTAL STUDENT POPULATION: _____
 SCHOOL HEALTH PROJECT ENROLLMENT: _____

STUDENT CONTACTS

A Total student contacts (encounters): _____

B Number of different students served (unduplicated count): _____

C Person originating the contact:

- 1. student _____
- 2. school health project staff _____
- 3. teacher _____
- 4. other school personnel _____
- 5. parent _____
- 6. other (specify) _____

SERVICES PROVIDED

D Type of visit:

- 1a. Primary/Episodic Care _____
- b. Management of Chronic Illness _____
- c. Follow-up (re-check) on previously identified condition _____
- d. Psycho/social visit _____
- 2. Minor Complaints (Nonbillable) _____
- 3. Immunization/Vaccination _____
- 4. Complete Physical Exam _____
- 5. Counseling/Education _____
- 6. Mass Screening:
 - a. Vision _____
 - b. Hearing _____
 - c. Dental _____

continued....

6d. Other (specify):

E Screenings: Abnormal findings

- 1. Vision _____
- 2. Hearing _____
- 3. Dental _____
- 4. Other _____

CONDITIONS SEEN ON SITE

F Presenting Complaints:

- 1. eye disorders _____
- 2. ear disorders _____
- 3. dental _____
- 4. respiratory _____

continued....

- 5. nose and throat _____
- 6. infections-general _____
- 7. allergic disorders _____
- 8. skin _____
- 9. heart and cardiovascular _____
- 10. blood disorders _____
- 11. gastrointestinal _____
- 12. genitourinary _____
- 13. musculoskeletal disorders _____
- 14. nutrition _____
- 15. neurological disorders _____
- 16. social behavioral problems/mental disorders _____
- 17. general symptoms, signs, and ill-defined conditions _____
- 18. immunization/vaccination _____

REFERRAL OFF-SITE

G Total number of off-site referrals: _____

H Reasons for off-site referrals:

1. eye disorders _____
2. ear disorders _____
3. dental _____
4. respiratory _____
5. nose and throat _____
6. infections-general _____
7. allergic disorders _____
8. skin _____
9. heart and cardiovascular _____
10. blood disorders _____
11. gastrointestinal _____
12. genitourinary _____

continued....

13. musculoskeletal disorders _____
14. nutrition _____
15. neurological disorders _____
16. social behavioral problems/mental disorders _____
17. general symptoms, signs, and ill-defined conditions _____
18. immunization/vaccination _____
- Total reasons _____

I Type of provider receiving referral from school health project:

1. grantee hospital, grantee neighborhood health center, or subcontractor to grantee _____
2. grantee hospital emergency room " _____

continued....

3. nongrantee hospital ambulatory clinic _____
4. nongrantee neighborhood health center _____
5. nongrantee hospital emergency room _____
6. private doctor or dentist _____
7. provider unknown _____
8. other (specify):

- Total providers _____

J Outcome of referral to off-site provider or parent

1. referral open _____
2. referral closed (condition evaluated/treated) _____
3. noncompliance _____

OTHER ACTIVITIES OF THE SCHOOL HEALTH SERVICES PROJECT

- K. In narrative form, please describe other coordinating or administrative activities conducted during the reporting period. Examples of the types of project-related activities that a grantee should reference include hiring and orienting staff, developing a management information system, research and evaluation, and public relations.

Please attach the narrative to this form.

APPENDIX D

- **SHDP PRINCIPAL QUESTIONNAIRE**
- **SHDP TEACHER QUESTICNNAIRE**

SCHOOL HEALTH SERVICES DEMONSTRATION PROJECT
PRINCIPAL QUESTIONNAIRE

WRI, a not-for-profit research and consulting firm, is conducting an evaluation of the New York State School Health Services Demonstration Project. As part of this effort, WRI is seeking the opinions of principals and a sample of teachers in participating schools. Your responses will provide descriptive information about the current project and contribute to future program planning.

WRI will consider your responses confidential. The findings of the survey will be presented in such a way that no specific individuals will be linked with any response. (If you would like to receive a summary of the findings of this survey, you may write your name and address in the space provided on the last page of this form.)

Please return the completed form to WRI as soon as possible in the stamped, addressed envelope provided.

THANK YOU FOR YOUR HELP.

* * * * *

1. What is the:

- a. name of your school? _____
- b. number of your school district? _____

2. In general, how much contact have you had with staff of the School Health Services Demonstration working at your school since the project began?
- ☐ a. regular contact (at least once a week)
 - ☐ b. periodic contact (monthly)
 - ☐ c. infrequent contact (less than monthly)

Comments:

3. To the best of your knowledge, what activities or services does the project provide that were not provided prior to the demonstration?

4. Please indicate the approximate number of times you have met with the School Health Services Demonstration staff for the following reasons since the demonstration began.

No. of Times

- ☐ developing protocols (e.g., process for dealing with child abuse)
 - ☐ discussions about the needs of specific students
 - ☐ program planning
 - ☐ administrative issues
 - ☐ personal health care (e.g., blood pressure checks, discussion of a personal medical concern)
 - ☐ other (Please explain.) _____
-

5. How would you rate the level of satisfaction that the following persons have with the School Health Services Demonstration Project:

	<u>Very Unsatisfied</u>	<u>Slightly Unsatisfied</u>	<u>Slightly Satisfied</u>	<u>Very Satisfied</u>	<u>Don't Know</u>
a. yourself?	☐	☐	☐	☐	☐
b. parents?	☐	☐	☐	☐	☐
c. teachers?	☐	☐	☐	☐	☐
d. students?	☐	☐	☐	☐	☐
e. school district administration?	☐	☐	☐	☐	☐
f. school board?	☐	☐	☐	☐	☐
g. parent/teacher organizations?	☐	☐	☐	☐	☐

6. To what extent does there appear to be coordination between the School Health Services Demonstration and existing support services (e.g., school-based support team) in your school? (Check one.)

☐ little coordination
☐ moderate coordination
☐ a great deal of coordination
☐ don't know

7. What effect(s) if any has the demonstration project had on the following persons:

a. students?

b. teachers?

c. parents?

d. others? (Please specify.)

8. How would you rate the following aspects of health services and health staff in your school:

	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Excellent</u>	<u>Don't Know</u>
<u>Services</u>					
a. availability of services?	☐	☐	☐	☐	☐
b. quality of services?	☐	☐	☐	☐	☐
c. efficiency of services?	☐	☐	☐	☐	☐
d. efficiency of follow-up?	☐	☐	☐	☐	☐
e. comprehensiveness of services?	☐	☐	☐	☐	☐
f. responsiveness of services?	☐	☐	☐	☐	☐
g. flexibility of services?	☐	☐	☐	☐	☐
h. continuity of services?	☐	☐	☐	☐	☐
<u>Staff</u>					
a. availability of staff?	☐	☐	☐	☐	☐
b. cooperativeness of staff?	☐	☐	☐	☐	☐
c. quality of staff?	☐	☐	☐	☐	☐

9. Who else in this school works in the areas of school health services and health education besides the staff of the School Health Services Demonstration Project? What are their health-related responsibilities, and approximately how many hours per month do they spend at your school?

<u>Job Title</u>	<u>Responsibilities</u>	<u>Hours/Month</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

10. What aspects of the School Health Services Demonstration Project are you most pleased with?

11. What aspects of the School Health Services Demonstration Project do you think should be improved?

12. The following list contains activities that a school health program like the one in your school might conduct. In your opinion what should be the top 10 priorities for the school health program in your school? (Select only 10 activities, and in the space provided rank them in order of their importance, with 1 = most important, 2 = next most important, etc.).

- ___ a. responding to minor complaints
- ___ b. responding to acute injuries/illness
- ___ c. responding to psychological problems
- ___ d. helping children cope with physical handicaps
- ___ e. screening for lice
- ___ f. vision screening
- ___ g. hearing screening
- ___ h. height and weight screening
- ___ i. dental screening
- ___ j. identifying cases of child abuse
- ___ k. working with dysfunctional families
- ___ l. identifying/assessing children with developmental delays
- ___ m. identifying/assessing children with learning disabilities
- ___ n. conducting comprehensive physical examinations
- ___ o. providing immunizations
- ___ p. managing chronic diseases (e.g., asthma)
- ___ q. teaching health education
- ___ r. providing TLC (tender loving care)
- ___ s. working to improve safety in the school environment
- ___ t. helping children to access needed health and dental services in the community
- ___ u. following up on referrals to community providers
others: (Please specify.)
- ___ v. _____
- ___ w. _____

13. Has attendance improved as a result of the School Health Services Demonstration Project? (Check one.)

- ☐ Yes
☐ No
☐ Don't know

Please explain:

14. Do you think that the School Health Services Demonstration Project has had an effect on learning?

- ☐ a. yes, a positive effect
☐ b. yes, a negative effect
☐ c. no, no effect

Please explain:

Would you like to receive a summary of the findings of this survey?

☐ Yes ☐ No

If yes, write your name and address here:

Thank you for your assistance.

Please send this questionnaire to WRI in the stamped, addressed envelope provided.

WRI
112 State Street
Albany, NY 12207

**SCHOOL HEALTH SERVICES DEMONSTRATION PROJECT
TEACHER QUESTIONNAIRE**

WRI, a not-for-profit research and consulting firm, is conducting an evaluation of the New York State School Health Services Demonstration Project. As part of this effort, WRI is seeking the opinions of principals and a sample of teachers in participating schools. Your responses will provide descriptive information about the current project and contribute to future program planning.

WRI will consider your responses confidential. The findings of the survey will be presented in such a way that no specific individuals will be linked with any response. (If you would like to receive a summary of the findings of this survey, you may write your name and address in the space provided on the last page of this form.)

Please return the completed form to WRI as soon as possible in the stamped, addressed envelope provided.

THANK YOU FOR YOUR HELP.

* * * * *

1. What is the:

a. name of your school? _____

b. number of your school district? _____

2. What grade(s) do you teach? _____

3. In general, how much contact have you had with staff of the School Health Services Demonstration working at your school since the project began?
- ☐ a. regular contact (at least once a week)
 - ☐ b. periodic contact (monthly)
 - ☐ c. infrequent contact (less than monthly)

Comments:

4. To the best of your knowledge, what activities or services does the project provide that were not provided prior to the demonstration?

5. Please indicate the approximate number of times you have met with the School Health Services Demonstration staff for the following reasons since the demonstration began.

No. of Times

- ☐ developing protocols (e.g., process for dealing with child abuse)
- ☐ discussions about the needs of specific students
- ☐ program planning
- ☐ administrative issues
- ☐ personal health care (e.g., blood pressure checks, discussion of a personal medical concern)
- ☐ other (Please explain.) _____

6. How would you rate the level of satisfaction that the following persons have with the School Health Services Demonstration Project:

	<u>Very Unsatisfied</u>	<u>Slightly Unsatisfied</u>	<u>Slightly Satisfied</u>	<u>Very Satisfied</u>	<u>Don't Know</u>
a. yourself?	☐	☐	☐	☐	☐
b. parents?	☐	☐	☐	☐	☐
c. other teachers?	☐	☐	☐	☐	☐
d. students?	☐	☐	☐	☐	☐
e. school and school district adminis- tration?	☐	☐	☐	☐	☐
f. school board?	☐	☐	☐	☐	☐
g. parent/teacher organizations?	☐	☐	☐	☐	☐

7. To what extent does there appear to be coordination between the School Health Services Demonstration and existing support services (e.g., school-based support team) in your school? (Check one.)

☐ little coordination
☐ moderate coordination
☐ a great deal of coordination
☐ don't know

8. What effect(s) if any has the demonstration project had on the following persons:

a. students?

b. teachers?

c. parents?

d. others? (Please specify.)

9. How would you rate the following aspects of health services and health staff in your school:

	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Excellent</u>	<u>Don't Know</u>
<u>Services</u>					
a. availability of services?	☐	☐	☐	☐	☐
b. quality of services?	☐	☐	☐	☐	☐
c. efficiency of services?	☐	☐	☐	☐	☐
d. efficiency of follow-up?	☐	☐	☐	☐	☐
e. comprehensiveness of services?	☐	☐	☐	☐	☐
f. responsiveness of services?	☐	☐	☐	☐	☐
g. flexibility of services?	☐	☐	☐	☐	☐
h. continuity of services?	☐	☐	☐	☐	☐
<u>Staff</u>					
a. availability of staff?	☐	☐	☐	☐	☐
b. cooperativeness of staff?	☐	☐	☐	☐	☐
c. quality of staff?	☐	☐	☐	☐	☐

10. What aspects of the School Health Services Demonstration Project are you most pleased with?

11. What aspects of the School Health Services Demonstration Project do you think should be improved?

12. The following list contains activities that a school health program like the one in your school might conduct. In your opinion what should be the top 10 priorities for the school health program in your school? (Select only 10 activities, and in the space provided rank them in order of their importance, with 1 = most important, 2 = next most important, etc.).

- ___ a. responding to minor complaints
- ___ b. responding to acute injuries/illness
- ___ c. responding to psychological problems
- ___ d. helping children cope with physical handicaps
- ___ e. screening for lice
- ___ f. vision screening
- ___ g. hearing screening
- ___ h. height and weight screening
- ___ i. dental screening
- ___ j. identifying cases of child abuse
- ___ k. working with dysfunctional families
- ___ l. identifying/assessing children with developmental delays
- ___ m. identifying/assessing children with learning disabilities
- ___ n. conducting comprehensive physical examinations
- ___ o. providing immunizations
- ___ p. managing chronic diseases (e.g., asthma)
- ___ q. teaching health education
- ___ r. providing TLC (tender loving care)
- ___ s. working to improve safety in the school environment
- ___ t. helping children to access needed health and dental services in the community
- ___ u. following up on referrals to community providers
- ___ v. others: (Please specify.)
- ___ w. _____

13. Has attendance improved as a result of the School Health Services Demonstration Project? (Check one.)

- ☐ Yes
☐ No
☐ Don't know

Please explain:

14. Do you think that the School Health Services Demonstration Project has had an effect on learning?

- ☐ a. yes, a positive effect
☐ b. yes, a negative effect
☐ c. no, no effect

Please explain:

Would you like to receive a summary of the findings of this survey?

☐ Yes ☐ No

If yes, write your name and address here:

Thank you for your assistance.

Please send this questionnaire to WRI in the stamped, addressed envelope provided.

WRI
112 State Street
Albany, NY 12207

APPENDIX E
GUIDE TO COMPLETING THE
SCHOOL HEALTH SERVICES PROJECT
DAILY VISIT LOG
AND
OFF-SITE REFERRAL LOG*

* A revised edition of the Guide was completed December 1983.

2/24/82

GUIDE TO COMPLETING THE SCHOOL

HEALTH SERVICES PROJECT

DAILY VISIT LOG

AND

OFF-SITE REFERRAL LOG

Your time and careful attention to the Daily Visit Log and the Off-Site Referral Log are greatly appreciated. These forms are important to the School Health Services Demonstration (SHSD) Project. It is necessary to complete all the questions, and to do so accurately. The information provided is the basis for on-going monitoring and evaluation.

DAILY VISIT LOG

The Daily Visit Log is kept at every School Health Services Demonstration (SHSD) project office. The purpose of the log is to provide a written record of each student contact made each day. Although SHSD staff often conduct other activities (e.g., parent conferences, classes in health education, and physician contacts), only direct services to students are listed in the daily log. (Include other activities in the regular reports to the state.) In the log, use a separate row for each student contact. Other instructions follow. Please read them carefully, and discuss any questions with your supervisor.

Codes

The top row of the log is labeled "Codes." A code number is required in each column headed by a numeral. To find the correct code number, see the coding sheet attached to the log.

Name

Print the student's first and last name in the space provided. Be sure that the spelling is correct. A case or record number may be added, if desired.

First Visit (✓)

If this is the student's first visit, place a checkmark in this box. (Note: Enter only one checkmark per student per year.)

Sex

Enter M or F.

Age

Enter the student's age.

Grade/Room

Enter the student's grade and homeroom number. (Note: If the student is in an Educationally Ungraded class, enter EU.)

Enrollment Status - Code 1

Enrollment status refers to the level of care for which the student is enrolled. Enter a zero (0) if no consent form from the parents is on file. Otherwise, use the consent form to determine the level:

- 1 (Level 1) — usual school health services only
- 2 (Level 2) — usual school health services and physical exam
- 3 (Level 3) — complete care

(Note: The type of care a student receives is not enrollment status.)

Presenting Complaint (Condition)

Why is the student seeking help (e.g., headache, stomachache, pencil poked in eye, needs immunization)? If the student has more than one complaint, all should be recorded.

Complaint - Code 2

Use the attached "Glossary of Presenting Complaints" to select the one category that best describes each of the student's complaints or conditions. Enter the code in the space provided. (Note: Either the SHSD nurse practitioner (NP) or the physician's assistant (PA) should monitor these entries. Health aides may need some initial training in choosing the best category.)

Aggressive Interaction (✓)

Check and complete this column if the student's injury is the result of an act of aggression. An act of aggression is defined as one in which there is a willful intent to cause harm (one child beating or biting another,

obvious child abuse, etc.). Do not enter injuries that result from student's horseplay. Completion of this column is voluntary.

Persons Initiating Contact - Code 3

Record here the code number of the person who first suggested contact with the SHSD staff. (See coding sheet attached to log.) In some cases, the contact person may be the student seeking SHSD services on his or her own initiative, even though a teacher provides the permission note. Examples of other possible initiators are the teacher who sends a student for an eye test or the parent or guardian who tells a child to visit the school nurse or who calls asking that a child be examined. Others who may initiate contact are any school personnel (from the principal to the school crossing guard) outside social workers, psychologists, or physicians and even SHSD staff. (Because SHSD does mass screenings, physical examinations for new students, follow-up visits, and immunizations, SHSD staff are often the initiators of contact.)

Services Provided

Note all services provided. A student may receive more than one service during a single visit. Also, children in Levels 2 and 3 can be billed for some services -- if they are enrolled in Medicaid. These billable items are listed in categories 1a through 1d, and in codes 3 and 4. (See coding sheet attached to log.)

- Items 1a - 1c are self-explanatory.
- Item 1d (psycho-social visit) must be provided by a professional (e.g., a social worker, psychologist, psychiatrist or other physician).
- Item 2 (first aid) refers to minor complaints, such as general symptoms. This cannot be billed to Medicaid -- even if the

child is enrolled in Levels 2 or 3 of the SHSD, and is also Medicaid-enrolled.

- Item 5 (counseling/education) refers to a one-to-one meeting between an SHSD staff member (e.g., NP, PA or HA) and a student. Nutrition, behavior problems, management of chronic illness, and substance abuse are examples of topics that may require counseling or education sessions.

Primary Care Diagnosis - ICD-9 Code

Complete this column only if a visit requires the skill of a doctor or mid-level practitioner. The professional, in noting the problem, should record its corresponding ICD-9 code. (Note: Such problems are often identified during primary care visits or complete physical examinations.)

Off-Site Referral (✓)

Place a checkmark (✓) in this column if an off-site referral is made to a professional. Do not check if the referral is made to a member of the SHSD staff. But do check if a referral is made to specialists at the grantee health center, or a recommendation is made to the parents that a child be examined or treated by a professional.

Rx - Code 7

Entries to be made here are self-explanatory.

Billing Status - Code 8

Always code whether the services provided can be billed. Mass screenings and treatments of minor complaints are entered as Code 1. They are non-billable services. Code 2 indicates a primary care, episodic care, or follow-up visit. Code 3 indicates a complete physical examination. (Note: In filling out the billing status, assume that all students visiting SHSD are enrolled in Medicaid.)

OFF-SITE REFERRAL LOG

The Off-Site Referral Log is a written record of the outside (school) referrals SHSD makes for students. Off-site referrals are usually to parents or service providers. Providers include doctors, dentists, and mental health and other health professionals. Every referral should be listed in the Log, regardless of whether the student is enrolled in the school health program.

Every column on the log has a purpose. In the instructions presented here, an asterisk (*) means that the needed information can be obtained from the Daily Visit Log.

Date of Referral

Record the date that the contact is made. That is, when a parent or provider is first informed of the child's need for services.

*Name

Print the student's first and last name in the space provided. Be sure that the spelling is correct. A case or record number may be added, if desired.

*Enrollment Status - Code 1

Enrollment status refers to the level of enrollment by the student seeking health services. Enter a zero (0) if no consent form from the parent is on file. Otherwise, use the consent form to determine the level. The choices are:

- 1 (Level 1) -- usual school health services only
- 2 (Level 2) -- usual health services and physical exam
- 3 (Level 3) -- complete care

(Note: The type of care a student gets is not always the same as the enrollment status.)

*Grade/Room

Enter the student's grade and homeroom number. (Note: If the student is in an Educationally Ungraded class, record EU.)

*Reasons for Off-Site Referral

Briefly describe the reason(s) for the referral -- e.g., physical, dental, or psychological examination, etc. (See Presenting Complaint on Daily Visit Log.)

Use the attached "Glossary of Presenting Complaints" to select the one category that best describes the student's condition. Enter this in the Code 2 space provided. (See Complaint Column - Code 2 on Daily Visit Log.) Refer questions to the SHSD nurse practitioner (NP) or physician's assistant (PA).

*Primary Care Diagnosis (ICD-9 Code)

The health professional (MD, NP, or PA) is responsible for recording the ICD-9 Code that most closely describes the student's condition when referred.

Type of Provider - Code 3

Fill in the type of service provider to whom the referral is made. (Note: A referral may be direct, such as a phone call to the professional to request an appointment for the child, or it may be just a recommendation to parents that the child be seen by a professional.)

Follow-up Date(s)

Were efforts made to find out if the child received services? If so, record the date, and identify each follow-up as one of the following:

- Client contact - Staff asked student directly.
- Call to home - Staff phoned parent or guardian at home or at work.
- Note sent - Staff sent a note home with the student, or through the mail.
- Home visit - Staff visited home.
- Health provider contact - Staff phoned or sent letter to provider.

Outcome - Code 4

Keep a progress record of the status of all off-site referrals. Use the following codes to make entries:

- Code 1: Referral open - The SHSD does not know whether the student has received evaluation or treatment. The condition probably persists.
- Code 2: Referral closed - The condition has been evaluated and treated. The child no longer needs care; or, the child has been referred back to SHSD for further care.
- Code 3: Non-compliance - The parent refuses to obtain services for the child, and the condition is still present.

Date Problem Is Resolved

Record the date SHSD learns a student's problem has been resolved. If the problem continues to require care, from either the off-site provider or the SHSD staff, make no entry. (Note: A health problem treated off-site is considered resolved only when no further care is needed.)

GLOSSARY OF PRESENTING COMPLAINTS

In filling out the required SHSD forms, always choose the one term that best describes the student's condition. Here's a list of key terms from which to choose. Read the definitions and/or examples for each of the terms. Discuss any questions with your supervisor.

- 1) Eye Disorders - Problems affecting eye health or vision (e.g., infections, inflammations, foreign bodies, eye strain, poor vision).
- 2) Ear Disorders - Problems producing pain, or interfering with hearing or equilibrium (e.g., wax build-up, hearing loss, infections, inflammations, foreign bodies; also, difficulty with walking, standing, and maintaining balance, if related to an ear disorder).
- 3) Dental - Unhealthy mouth or gums (e.g., cavities, toothaches, missing or overcrowded teeth, plaque, bleeding gums).
- 4) Respiratory - Problems of the upper or lower respiratory tract, from nose to lungs, that affect breathing (e.g., asthma, colds, flu, bronchitis, respiratory problems).
- 5) Nose and Throat - Disorders of the nose and throat not directly related to breathing (e.g., nosebleeds, postnasal drip, foreign bodies in the nose; strep throat, infected tonsils, hoarseness, sore throat).
- 6) Infections - General - Diseases caused by bacteria, parasites, and viruses (e.g., mumps, mononucleosis, scabies, gonorrhea).
- 7) Allergic disorders - A general category of allergic symptoms and reactions (e.g., wheezing, runny nose, hives and certain other rashes).
- 8) Skin - A range of general infections, inflammations, and infestations of the skin and hair (e.g., ringworm, lice, heat rash).
9. Heart and Cardiovascular - Conditions affecting the circulatory system (e.g., high blood pressure, heart murmurs, rheumatic fever; also, certain birth abnormalities of the heart, arteries, or veins).

- 10) Blood Disorders - Disease or other problems with the blood (e.g., anemia, sickle cell anemia, clotting defects).
- 11) Gastrointestinal - General and infectious problems of digestion (e.g., stomachache, vomiting, appendicitis, hernia, diarrhea, food poisoning).
- 12) Genitourinary - Any genital or urinary tract infection or abnormality (e.g., kidney or bladder infections, undescended testicles, menstrual problems, soiling or wetting pants).
- 13) Musculoskeletal Disorders - Joint, muscle, and bone problems (e.g., curvature of the spine/scoliosis, arthritis, back or muscle pain, suspected broken arms or legs, all sprains).
- 14) Nutrition - The results of poor diet (e.g., obesity, over- or underweight, missing meals, forced vomiting).
- 15) Neurological Disorders - Physical disorders of the nervous system (e.g., epilepsy, meningitis, convulsions, cerebral palsy).
- 16) Problem Social Behaviors/Mental Disorders - Adjustment or psychiatric disturbances (e.g., stuttering, anorexia nervosa, poor school conduct, hyperactivity, drug or alcohol abuse; also, personality disorders, known mental disorders).
- 17) General Symptoms, Signs, and Ill-Defined Conditions - A catch-all category for presenting complaints that do not fit into other categories (e.g., fever of unknown origin, chills, fainting, nausea, drowsiness, headaches, stomachaches without diarrhea or vomiting).
- 18) Immunization/Vaccination - Routine protection against such diseases as measles, whooping cough, diphtheria, polio.
- 19) Endocrine Disorders - Problems involving hormone-producing organs (e.g., diabetes).
- 20) Minor Injuries - Injuries that can be treated routinely (e.g., small burns and cuts, bumps, and bruises).